



CERTIFIED WOMEN-OWNED BUSINESS ENTERPRISE

PRECISION
ENVIRONMENTAL SERVICES, INC.

831 RT. 67, LOT 38 A
BALLSTON SPA, NY 12020
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PERIODIC REVIEW REPORT

PERIOD: July 1, 2016 to June 30, 2019

**DAMBROSE CLEANERS SITE
1517-1519 Van Vranken Avenue
Schenectady, NY**

NYSDEC SITE NO.: 447030



PREPARED FOR:

NEW YORK STATE DEPARTMENT OF
ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL
REMEDiation
625 BROADWAY, 12TH FLOOR
ALBANY, NY 12233

PREPARED BY:

PRECISION ENVIRONMENTAL
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831 ROUTE 67, LOT 38A
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August, 2019

TABLE OF CONTENTS

- 1.0 Executive Summary
- 2.0 Site Overview
- 3.0 EC/IC Compliance and Evaluation of performance,
effectiveness, and protectiveness
- 4.0 Monitoring/ Operation & Maintenance
- 5.0 Conclusions and Recommendations

List of Figures

- Figure 1 Area Map
- Figure 2 Site Map

Appendices

- Appendix A 2018 & 2019 Summary Report
- Appendix B Certifications

1.0 EXECUTIVE SUMMARY

This Periodic Review Report document provides a written synopsis of work from July 1, 2016 through June 30, 2019 at the Dambrose Cleaners Inactive Hazardous Waste Disposal Site. Site investigation and remediation was conducted in accordance with a published Site Management Plan (SMP) and administration provided by the New York State Department of Environmental Conservation (NYSDEC or Department).

Background

The Dambrose Cleaners site is located at 1517 and 1519 Van Vranken Ave. in the City of Schenectady, Schenectady County, NY. It is located in a residential and commercial portion of the City approximately 300 feet north of Union College. Retail dry cleaning operations from approximately 1957 through 2001 reportedly resulted in contamination of soil and groundwater due to release of Tetrachloroethene (PCE). The Site was added to the Registry of Inactive Hazardous Waste Disposal Sites on December 6, 2001 as Site #447030.

After site planning, investigation and design, a subslab depressurization system (SSDS) was installed at the site in 2005 as part of an interim remedial measure. A Record of Decision (ROD) was issued for the site in October 2007 and a Soil Vapor Extraction System (SVES) was installed in 2011.

Effectiveness and Compliance

The 2011 SMP describes Engineering and Institutional Controls, Site Monitoring requirements, and an Operation and Maintenance Plan. Compliance with the remedial goals was demonstrated through site monitoring and operation & maintenance. Engineering Controls include:

- Soil Cover and Concrete Cap
- Sub slab depressurization system (SSDS)
- Soil Vapor Extraction System (SVES)

No significant changes were observed to these controls during the reporting period.

Institutional Controls

Institutional controls implemented as part of the ROD include:

- limiting the use and development of the property,
- compliance with the approved Site Management Plan, and
- restricting uses of groundwater as a source of potable or process water.

Floor 1 of the building was recently converted to a residential apartment from prior use as a drop off service for off site dry cleaning. This apartment use is allowed under the “restricted residential” institutional control. No significant change in site or potable water

use has occurred since the prior reporting period and thus compliance with these controls was satisfied.

Monitoring and Operation & Maintenance

During this review period, the following monitoring and O&M procedures were completed:

1. Monthly visual monitoring of the SSDS;
2. Monthly monitoring with the PID of the SVES; and
3. groundwater sampling and analysis. Emerging Contaminants were added to the scope per the NYSDEC.

Recommendations

Concentrations of contaminants in groundwater, soil and subslab vapor indicate the continued need for operation of the implemented Engineering /Institutional Controls at the site. Specific recommendations include:

- Cut back vines and vegetation from retaining wall and remediation shed.
 - performance of additional interior sampling of the basement air and SSDS airstream to further document the effectiveness of the SSDS;
 - consideration should be given to supplemental remedial alternatives, such as carbon slurry injection, whereby spread of PCE and breakdown products will be reduced or eliminated;
 - Continued monthly monitoring of the SVES and SSDS.
-

2.0 SITE OVERVIEW

The Dambrose Cleaners site is located at 1517 and 1519 Van Vranken Ave. in the City of Schenectady, Schenectady County, NY. The site encompasses an 0.11 acre lot within a City block bounded by Nott Street, Van Vranken Avenue, and Hattie and Carrie Streets. The site is located in an urban setting and is surrounded by both private residence and commercial business. Figure 1 provides additional information on general site location. The site consists of a two story building and the first floor was recently converted to a residential apartment from prior use as a drop-off service for off-site dry cleaning. A residential apartment also exists on the second floor.

Retail dry cleaning operations reportedly existed at the site from approximately 1957 through 2001. This historic on premises dry cleaning operations and the storage/use of Tetrachloroethene (PCE) resulted in at least one documented spill in 1989. This use is believed to have contributed to releases as a result of poor operational practices and housekeeping. Key findings and actions were:

- PCE and associated degradation products were initially documented at the site in soil, groundwater, soil gas and indoor air. PCE concentrations in groundwater were documented to be as high as 15,000 µg/L.
- Concentrations within indoor air were found as high as 540 µg/m³.
- A subslab depressurization system (SSDS) was installed at the site in 2005 as part of an interim remedial measure.
- A Record of Decision (ROD) was issued for the site in October 2007.
- In January 2011 a Soil Vapor Extraction System (SVES) was installed and made operational pursuant to the ROD.
- A Site Management Plan was prepared in October, 2011 by Malcom Pirnie, Inc. to document proposed actions intended to manage remaining contamination at the Site.
- The SSDS and SVES remain in operation as of the date of this report. The goal of the SVES is to remediate the identified and perceived source of PCE impacts located at the rear of the property.

Figure 2 is a Site Map obtained from the Feb. 7, 2011 property map by Malcom Pirnie, Inc.

3.0 **EC/IC Compliance and Evaluation of performance, effectiveness, and protectiveness**

Engineering controls on the site are:

- soil cover and concrete;
- sub slab depressurization system; and
- soil vapor extraction system.

Institutional Control on the site is agreement to an environmental easement to:

- Limit the use and development of the property to restricted residential use, which would also permit commercial or industrial uses;
- Require compliance with the approved Site Management Plan;
- Restrict the uses of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH;

3.1 **Soil Cover and Concrete Cap**

After construction completion of the SVE system, clean imported backfill was placed over the gravel trenches. A 10- inch thick concrete slab was then constructed and incorporated as a parking area over the western portion of the Site. This cap system minimizes exposure to remaining contamination in soil.

Visual inspection of the soil cap and concrete occur on a monthly basis and during annual evaluation to monitor performance of this control. Both are significantly intact as originally constructed with no obvious wear.



3.2 **Sub slab depressurization system (SSDS)**

In 2005, a sub-slab depressurization system with three suction points was installed to create a negative pressure gradient between the basement and the area beneath the building slab. Additionally, cracks and seams in the slab were sealed, and the sump was capped and sealed. Vapor from beneath the slab is vented above the roofline of the Dambrose Cleaners Building.

During this monitoring period the system has operated well. Vacuum beneath the slab is documented through visual inspection of system controls and the manometer. The manometer registered 2.45 inches of water which is adequate for the vacuum pressure.



Air samples of SSDS exhaust and SVE system were analyzed via TO-15 but not during this PRR period based on specific scoping from the DEC.

3.3 Soil Vapor Extraction System

The purpose of the SVE system is to mitigate adsorbed contaminant mass within the vadose zone and capture fugitive VOCs. The vacuum and negative airflow induced by the SVE blower draws the contaminant mass upward to the horizontal SVE lines. Following extraction by the blower, the raw recovered vapor is then discharged to the atmosphere. Currently, no method of off-gas treatment has been applied.

The SVE system consists of one 33 foot long and two 25 foot long subsurface horizontal soil vapor extraction wells bedded in trenches of granular material. The system activated on January 10, 2011. It has generally been in operation since this date, with periodic maintenance shutdown.

Appendix A contains the 2018 Summary Report, complete with tables and analytical results. It includes historical data back to 2004. Table 1 from the report (SVE System Removal Summary) indicates contaminant removal continues to fluctuate. This may be due to variance of rain events, which often affect groundwater levels and exposure of greater surface area of the SVE wells to the smear zone and adsorbed contaminant mass in soil.



3.4. Institutional controls

Institutional Control on the site is current as described below:

- 3.4.1. *Limit the use and development of the property to restricted residential use, which would also permit commercial or industrial uses;*
“Restricted-residential use” is the land use category which shall only be considered when there is common ownership or a single owner/managing entity of the site. Restricted-residential use:
(a) shall, at a minimum, include restrictions which prohibit:
(1) any vegetable gardens on a site, although community vegetable gardens may be considered with department approval; and
(2) single-family housing;

The first floor was converted, prior to this PRR period, to a residential apartment from prior use as a drop-off service for off-site dry cleaning. A residential apartment also exists on the second floor. While this land use is residential in nature, it complies with the “Restricted-residential use” Institutional Control as defined above.

3.4.2. *Require compliance with the approved Site Management Plan;*
Periodic monitoring, reporting, operation, and maintenance is conducted at the site in compliance with this periodic review report and the site management plan.

3.4.3. *Restrict the uses of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH;*

Public water is currently provided to the building.

4.0 MONITORING/OPERATION & MAINTENANCE

Site Monitoring helps evaluate the performance and effectiveness of the remedy:

- SSDS to control concentrations of Site contaminants in indoor air;
- SVES to reduce contamination at the Site;
- Soil cover and concrete cap to function as a barrier to receptor exposure to the remaining contamination; and
- Entire remedy for green remediation principles.

As described in the Site Management Plan and the table below, routine monitoring of the remedy is required.

Monitoring Program	Frequency*	Matrix	Analysis
SVES	Initial baseline monitoring, followed by semi-annual monitoring for one year and annual monitoring thereafter	1. Contaminant concentrations in soil vapor as represented by samples of influent to the SVES 2. Vacuum maintained in each leg of the SVES collection system	1. VOCs in air by TO-15 2. Measurement of vacuum in each leg of the collection system using electronic system data
SSDS	Initial baseline monitoring, followed by semi-annual monitoring for one year and annual monitoring thereafter	Vacuum maintained under the basement slab of 1517/1519 Van Vranken Avenue	Measurement of SSDS vacuum, using the SSDS system output readings
Groundwater	Initial baseline monitoring, followed by semi-annual monitoring for one year and one monitoring event every fifth quarter thereafter	Groundwater in the monitoring wells shown on Figure 3, (subject to adjustment by the NYSDEC	VOCs by EPA Method 8260B and groundwater elevations
Soil Cover and Concrete Cap	Inspection at each monitoring event conducted for other media as identified herein	Soil Cover and Concrete Cap	Visual inspection

* Frequency until otherwise approved by the NYSDEC and NYSDOH.

4.1 SSDS Monitoring

This task included general system review of blower, system controls and piping in the basement of the building.



4.2 SVES Monitoring

This task included general system review of blower, related equipment, and system components. Monitoring with the PID indicates contaminant removal continues to fluctuate.

System monitoring and maintenance has not yielded significant deficiencies during the PRR period, other than vegetative growth (grape vines and possibly Japanese

Knotweed) over the concrete retaining wall and the Remediation Shed. These need to be cut back/removed soon so system effectiveness is not compromised.



4.3 Groundwater Monitoring

Groundwater monitoring includes water level measurements, monitoring well inspection, and groundwater sampling. During this PRR period, groundwater sampling occurred August 16, 2017 and August 22, 2018. Since the SMP states monitoring every five quarters, it is suggested to provide sampling in November of this year.

Water levels in seven monitoring wells (MW-1R, MW-2R, MW-3, MW-4, MW-6, MW-7, and MW-10) were recorded to determine groundwater elevations. Elevations ranged from 185.05 feet (MW-10) to 196.56 (MW-3). These levels were generally consistent with prior years. The groundwater gauging and elevation data is presented in the attached Table 2 of the Appendix A report.

In addition to determining the depth to groundwater, select monitoring wells were purged of a minimum of three well volumes by manual repetitive bailing, allowed to re-charge to equilibration, and sampled. All samples were obtained by aseptic techniques, secured in clean laboratory supplied glassware, labeled, and placed on iced storage for subsequent submission under chain of custody to the NYS DEC contract laboratory, TestAmerica of Buffalo, NY. Analysis was via:

- EPA Method 8260B for VOCs;
- EPA Method 8270 SIM for 1,4-Dioxane;
- EPA Method 537 for Perfluorinated Alkyl Substances (PFAS).

4.3.1 Volatile Organic Compounds

Per Table 4 of the report in Appendix A, constituents of concern, including PCE and its daughter compounds, were found in site monitoring wells. Four wells (MW-1R, MW-2R, MW-4 and MW-6) were at or above the standards established in the NYSDEC - *Division of Water Resources, Classes, and Quality Standards for Groundwater*, Chapter 10 of Title 6, Article 2, Part

703.5. Results from 2017 were generally lower than previous years, however, this may have been an anomaly since 2018 results were more consistent with prior years. While the data indicates the PCE contaminant plume is generally limited to the Dambrose Cleaners site and properties located immediately down gradient, it is of particular interest to point out contaminants in MW-4 increased from prior years results. MW-4 is immediately downstream of the site and no mechanism is in place to thwart the continued down gradient spread of the dissolved phase contaminants.

4.3.2 1,4-Dioxane and Perfluorinated Alkyl Substances (PFAS)

In light of emerging contaminants in the environment, NYSDEC requested inclusion of 1,4 dioxane and PFAS compounds in groundwater monitoring.

As listed in Table 5 of the report in Appendix A, the only detection of 1,4-dioxane was in MW-1R at 0.19 µg/L. This detection is below the NYSDEC internal screening value of 1 µg/L.

PFOA and/or PFOS concentrations exceeded NYSDEC screening values in three (3) wells (MW-2R, MW-4, and MW-7), and concentrations of Perfluoropentanoic Acid (PFPeA) and 6:2-Fts exceeded screening values in four (4) wells (MW-2R, MW-3, MW-4, MW-7, and MW-10).

Total combined PFAS concentrations within monitoring well MW-7 (1,455.56 ppt) exceeded the internal screening value of 500 ppt. PFOS and PFOA combined accounted for 69 ppt and 6:2-Fts was reported at 1,300ppt.

The EPA established the health advisory level at 70 parts per trillion (ppt) or nanograms per liter (ng/l) for a lifetime exposure to PFOA and PFOS. No wells contained combined concentrations of PFOS and PFOA at 70ppt, however and as noted above, the combined concentrations of these compounds at MW-7 was 69 ppt.

4.4 Soil Cover and Concrete Cap Monitoring

At the time of each monitoring event, a visual inspection of the soil cover and concrete cap was conducted. The purpose of the visual inspection was to identify any changes, such as damage, to the surficial media which could compromise the functionality of the soil cover and/or concrete cap. In addition, cursory inspection was provided during monthly monitoring of the SVES.



No significant wear on the soil cover and concrete cap was observed. This control appears to be maintained in satisfactory condition. As noted previously, however, visual inspection of the retaining wall was not completed due to the thick vegetative growth.



5.0 CONCLUSIONS AND RECOMMENDATIONS

This Periodic Review Report described how all requirements of the SMP were met. This was accomplished through each component of the remedy - the respective monitoring, operation and maintenance of the following Engineering controls and Institutional Controls:

- soil cover and concrete;
- sub slab depressurization system;
- soil vapor extraction system.
- Site environmental easement.

Successful implementation of each component of the remedy contributed to achievement of remedial objectives for the site. Recommendations for the project are:

- ❖ Groundwater monitoring of VOCS indicate contaminants in MW-4 increased from prior years results. Since MW-4 is immediately downstream of the site, consideration should be given to supplemental remedial alternatives, such as carbon slurry injection, whereby spread of PCE and breakdown products will be reduced or eliminated, and natural attenuation can be enhanced via addition of nutrients or chemical oxidants.
- ❖ interior sampling of the basement air as well as the SSDS airstream should be completed to further document its effectiveness;
- ❖ continued monthly monitoring of the SVES and SSDS.
- ❖ Cut back vines and vegetation from retaining wall and remediation shed

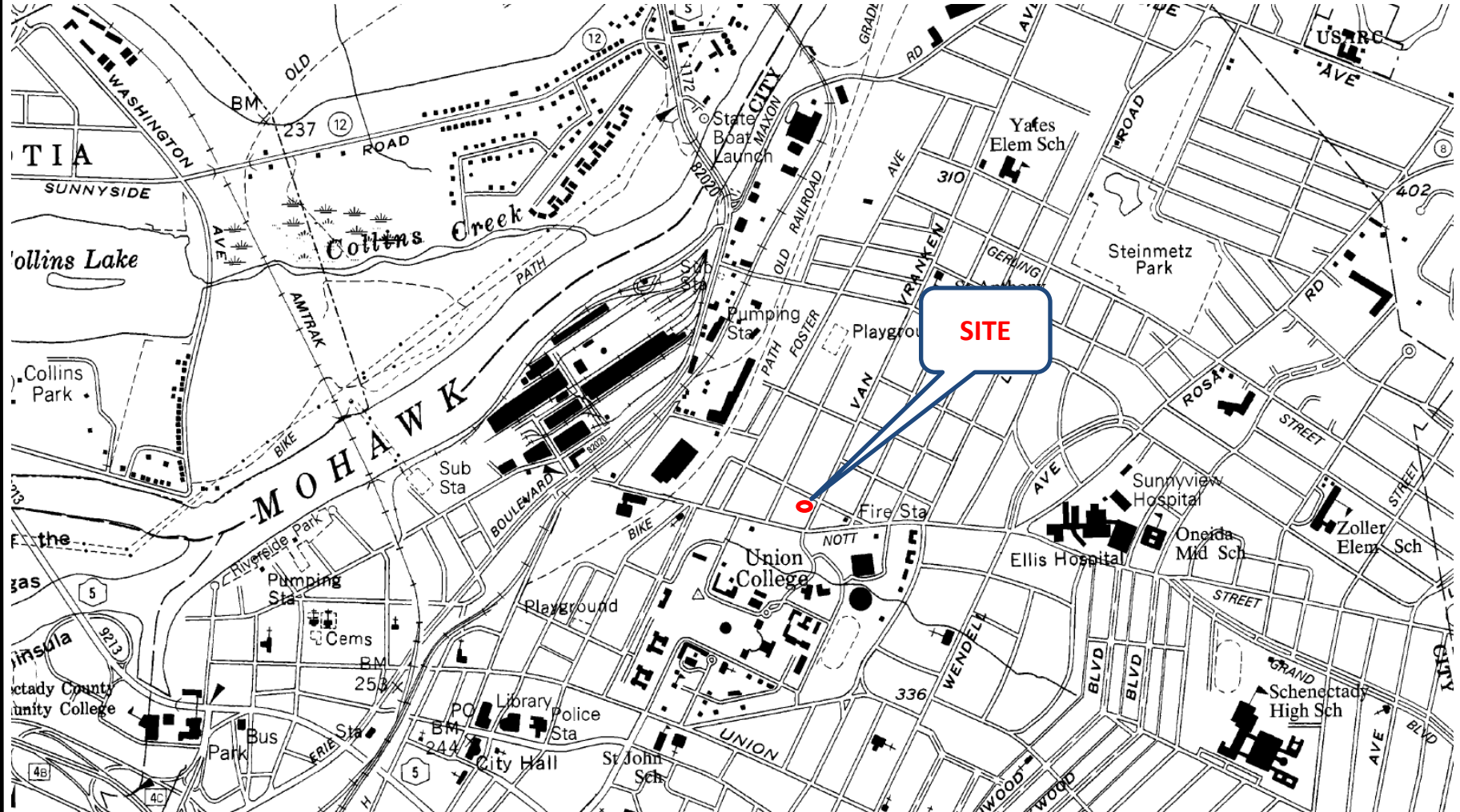
DAMBROSE CLEANERS
PERIODIC REVIEW REPORT:

NYSDEC SITE 447030
July 1, 2016 to June 30, 2019

DAMBROSE CLEANERS
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FIGURES



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Figure 1 – LOCATION MAP

Dambrose Cleaners – 1517 Van Vranken Avenue

City of Schenectady, Schenectady County, New York

NYSDEC Site # 447030

Scale: NONE

APPENDIX A

2018 Summary Report



PRECISION
ENVIRONMENTAL SERVICES, INC.

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CERTIFIED WOMEN-OWNED BUSINESS ENTERPRISE



Via Electronic Mail: Aaron.Fischer@gw.dec.state.ny.us

March 4, 2019

Mr. Aaron Fischer, E.I.T.
Assistant Environmental Engineer
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway, 12th Floor
Albany, NY 12233-7013

**Re: 2018 & 2019 Groundwater Monitoring and Remedial Status Report
Dambrose Cleaners
1517 Van Vranken Avenue
Schenectady, New York
NYS DEC Site No.: 447030**

Dear Mr. Fischer:

This letter serves as the status report for groundwater monitoring and ongoing remediation conducted at the former Dambrose Cleaners Site, located at 1517 Van Vranken Ave., City of Schenectady, NY (see attached Figure 1 for site location detail) during the time period of June 2018 to February 2019. Remedial efforts during the monitoring period consisted of monitoring and maintaining a SVE system that has been in operation at the site since January 2011. Groundwater monitoring consisting of well gauging and sampling occurred on August 22, 2018. Groundwater was sampled for site specific (volatile organic compounds) and emerging contaminants (1,4-Dioxane and Perfluorinated Alkyl Substances).

1.0 Soil Vapor Extraction System Status:

The purpose of the SVE system is to mitigate the contaminant mass documented within the vadose zone below the site and capture fugitive VOCs. The vacuum and airflow induced by the SVE blower draws the contaminant mass located within the vadose zone upward to three (3) horizontal SVE lines (see attached Figure 2 for additional SVE system layout detail). Following extraction by the SVE blower, the raw recovered vapor is then discharged to the atmosphere. Currently, no method of off-gas treatment has been applied.

Regular SVE system operation and maintenance (O&M) visits have been performed during the monitoring period. During the O&M visits, field screening of the SVE effluent air stream was performed and recorded via photo-ionization detector (PID) screening. The maximum concentration detected within the SVE effluent air stream during the current monitoring period was 150 parts per billion (ppb) which was recorded on August 23, 2018. A summary of the SVE effluent concentrations recorded during the monitoring period is included in the attached Table 1 (SVE System Removal Summary).

2.0 Well Gauging and Groundwater Gradient Determination:

PES personnel recorded the water level in seven monitoring wells (MW-1R, MW-2R, MW-3, MW-4, MW-6, MW-7, and MW-10) during the August 2018 monitoring event to determine the

depth to groundwater at each location. The documented depth to groundwater measurements in surveyed wells ranged from 1.49 feet (MW-4) to 6.61 feet (MW-1R).

The depth to groundwater data from each surveyed monitoring well was utilized to calculate the groundwater elevations at each respective location. The groundwater elevations in the gauged wells during the monitoring event ranged from 185.05 feet (MW-6) to 196.56 (MW-3). The groundwater gauging and elevation data is presented in the attached Table 2 (Summary of Groundwater Gauging and Elevation Data).

3.0 Groundwater Sampling Protocols and Laboratory Analysis Results:

In addition to determining the depth to groundwater, select monitoring wells were purged and subsequently sampled. Purging was achieved via peristaltic pump and dedicated high-density polyethylene (HDPE) tubing to remove a minimum of three well volumes or when equilibrium was reached with respect to physical parameters (including pH, Temperature, Total Dissolved Solids, Dissolved Oxygen, Turbidity, Oxidation Reduction Potential and Conductivity) using low flow methods.

Following purge and recharge to equilibration groundwater samples were collected. All samples were obtained by aseptic techniques, secured in clean laboratory supplied glassware, labeled, and placed on iced storage for subsequent submission under chain of custody to the NYSDEC contract laboratory, TestAmerica of Buffalo, NY. Groundwater samples were analyzed via EPA Method 8260 B for VOCs, EPA Method 8270 SIM for 1,4-Dioxane, and EPA Method 537 for Perfluorinated Alkyl Substances (PFASs) including Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS).

All stabilized physical parameters were recorded prior to PFAS sampling. See attached Table 3 - Summary of Physical Field Parameters for details. PFAS samples were collected under both NYSDEC Sampling Guidelines and Protocols and PFC Groundwater Samples from Monitoring Wells Sample Protocol, which includes, but is not limited to the use of HDPE or Polypropylene bottles, separate coolers, HDPE tubing, nitrile gloves and non-waterproof clothing. Please see PFAS Sampling Checklist included in Attachment 1 for additional details.

As the attached Table 4 (Summary of Groundwater Analytical Results) indicates, site-specific constituents of concern, including Tetrachloroethene (PCE) and/or its daughter compounds Trichloroethene (TCE), cis-1,2-Dichloroethene (DCE) and Vinyl Chloride, were found in four monitoring wells (MW-1R, MW-2R, MW-4, and MW-6). Concentrations of these contaminants exceeded the standards established in the NYSDEC - *Division of Water Resources, Classes, and Quality Standards for Groundwater*, Chapter 10 of Title 6, Article 2, Part 703.5 in two (2) wells (MW-2R and MW-4). A copy of the laboratory analytical report for the collected samples is included in Attachment 2.

Table 5 contains a summary of laboratory analysis for emerging contaminants 1,4-Dioxane and PFASs. 1,4-Dioxane was only detected in a single sample from monitoring well MW-1R at a concentration (0.19 µg/L) that is less than the NYSDEC internal screening value of 1 µg/L (parts per billion).

There currently are no published groundwater standards for PFAS compounds; however, the NYSDEC does have internal screening values of 10 parts per trillion (ppt) for PFOA and PFOS each respectively. There are also screening values of 100 parts per trillion (ppt) for 19 other PFAS family compounds and a screening value of 500 parts per trillion (ppt) is used for the total of all 21 compounds tested under the 537 Modified Method. PFAS compounds were

detected in each of the seven (7) sampled wells. PFOA and/or PFOS concentrations exceeded the NYSDEC screening value in three (3) wells (MW-2R, MW-4, and MW-7), and concentrations of Perfluoropentanoic Acid (PFPeA) and 6:2-Fts exceeded screening values in four (4) wells (MW-2R, MW-3, MW-4, MW-7, and MW-10).

Total combined PFAS concentrations within monitoring well MW-7 (1,455.56 ppt) exceeded the internal screening value of 500 ppt. PFOS and PFOA combined accounted for 69 ppt and 6:2-Fts was reported at 1,300ppt.

In addition, and for comparative purposes, the EPA drinking water standard of 70 parts per trillion for combined concentrations of PFAS and PFOS can be used. The EPA has established the health advisory level at 70 parts per trillion (ppt) or nanograms per liter (ng/l) for a lifetime exposure to PFOA and PFOS. No wells contained combined concentrations of PFOS and PFOA at 70ppt, however and as noted above, the combined concentrations of these compounds at MW-7 was 69 ppt.

4.0 Conclusions/Recommendations:

PES has been conducting routine O&M at the former Dambrose Cleaners site, which includes SVE air effluent screening and groundwater sampling and analysis via EPA method 8260. Monitoring conducted of the remedial system indicates that the system continues to process contaminant mass. Data collected also indicates that concentrations of PCE in groundwater continues to fluctuate. A historical summary of groundwater sample results has been presented in Table 6. Trends in contaminant fluctuation have been graphically illustrated in the attached Graphs 1-4. Data collected and included within this table and these graphs suggests that dissolved phase contaminants on site are degrading via natural attenuation and with the support of the SVE system. There exists, however, no mechanism to thwart the continued down gradient spread of the dissolved phase contaminants. This is evident in the increase in contaminants in MW-4. Data included in the graphs suggests PCE, TCE and cis-1/2-DCE are increasing in MW-4, which is immediately down gradient of the site. Attached Figure 3 provides additional detail regarding the location of off site wells.

Consideration should be given to supplemental remedial alternatives, such as carbon slurry injection, whereby spread of PCE and breakdown products will be reduced or eliminated, and natural attenuation can be enhanced via addition of nutrients or chemical oxidants. At a minimum and in order to continue to address the documented VOC contamination and monitor the reduction in contaminant concentrations, PES recommends further operation of the soil vapor extraction system and routine groundwater monitoring.

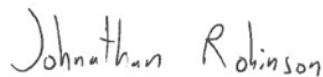
Additionally, PES also collected groundwater samples to be analyzed for emerging contaminants, 1,4-Dioxane and PFASs. 1,4-Dioxane was found in a single well at a concentration less than the internal screening value currently prescribed by NYSDEC. Numerous PFASs were documented in each of the seven (7) sampled site wells. Four (4) wells contained concentrations exceeding their respective internal screening values.

If you have any questions or comments regarding the above information, please contact the undersigned at (518) 885-4399.

Sincerely,
PRECISION ENVIRONMENTAL SERVICES, INC.



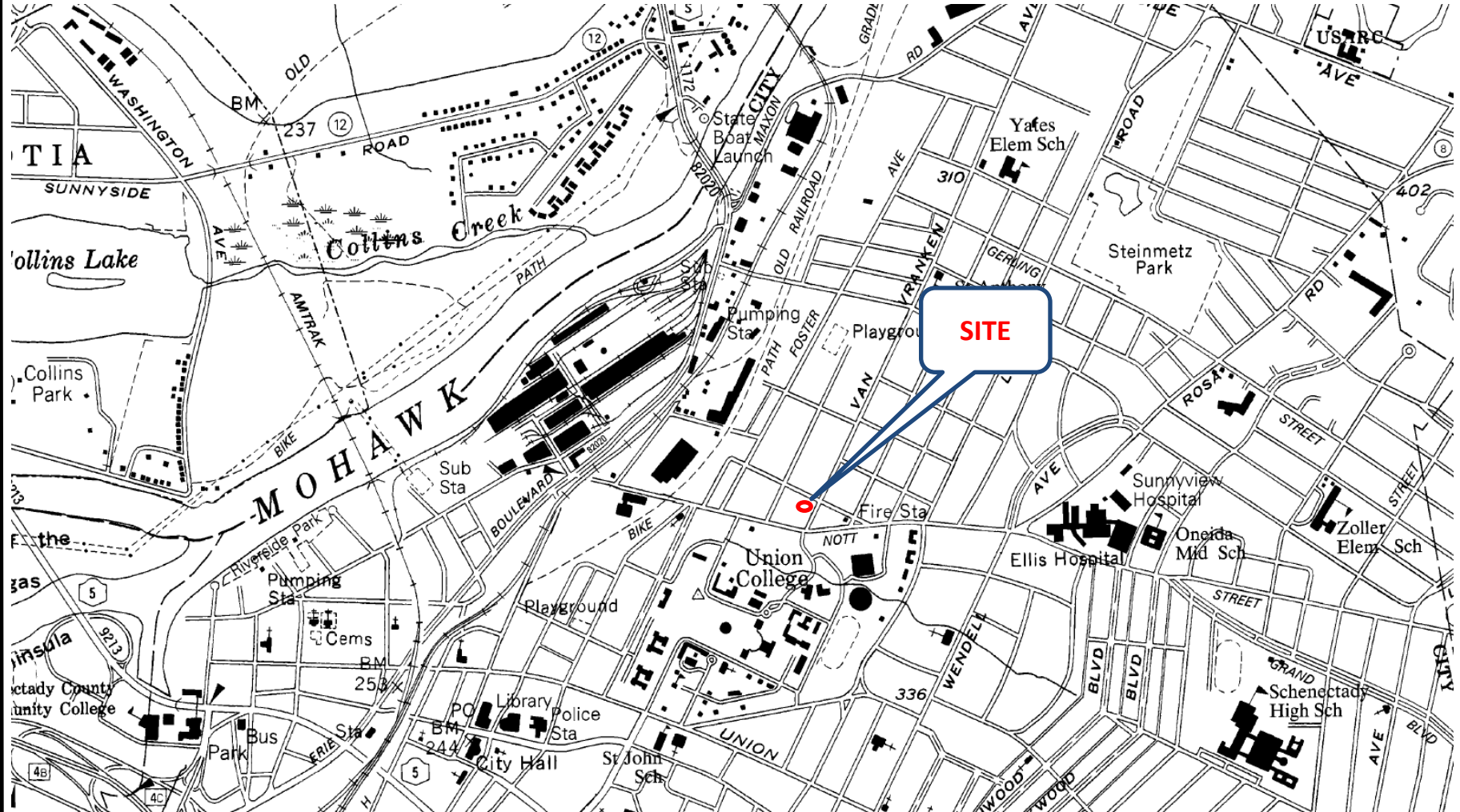
Stephen M. Phelps, P.G.
Project Manager



Johnathan Robinson
Environmental Scientist

Enclosures
Figures
Tables & Graphs
Attachments

FIGURES



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Figure 1 – LOCATION MAP

Dambrose Cleaners – 1517 Van Vranken Avenue

City of Schenectady, Schenectady County, New York

NYSDEC Site # 447030

Scale: NONE





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OFF SITE WELL LOCATIONS

DAMBROSE CLEANERS

PROJECT #:	
LOCATION: 1517 VAN VRANKEN AVE., SCHENECTADY, NY	
DATE: 2/27/2019	DRAWN BY: SMP
FIGURE: 3	SCALE: AS SHOWN

LEGEND

MW-1  MONITORING WELL

- NOTES:
- AERIAL IMAGE SOURCE: GOOGLE
 - ALL LOCATIONS ARE APPROXIMATE

TABLES

TABLE - 1
SVE System Removal Summary

Dambrose Cleaners
1517 Van Vranken Avenue
Schenectady, NY

	SVE Effluent Vapor Concentration*	Air Flow
Date	(ppb)	(SCFM)
1/10/2011	650	96.00
1/11/2011	700	94.78
1/12/2011	1067	93.00
1/13/2011	750	94.82
1/14/2011**	1300	94.07
1/28/2011	400	94.59
2/18/2011	930	91.75
3/4/2011	206	95.10
3/18/2011	121	91.33
4/1/2011	174	92.25
4/15/2011	700	93.36
5/20/2011	340	88.63
6/22/2011	810	87.89
7/27/2011	847	85.66
9/8/2012**	-	-
10/7/2011	1200	92.86
11/1/2011	284	94.14
12/14/2011	0	95.47
1/16/2012	500	94.91
1/30/2012	200	95.53
2/21/2012	400	99.21
3/15/2012	0	96.92
4/9/2012	400	93.81
5/24/2012	414	89.05
6/11/2013	144	88.43
7/2/2013	-	88.39
8/23/2013	358	88.36
9/20/2013	217	88.74
10/24/2013	0	91.17
11/22/2013	131	95.16
12/30/2013	110	96.03
1/27/2014	200	95.70
3/7/2014	0	100.03
4/4/2014	0	94.14
5/12/2014	200	91.71
6/3/2014	185	89.52
7/7/2014	11	88.12
8/4/2014	500	89.09
9/2/2014	369	87.50
10/2/2014	636	92.38
11/3/2014	258	93.00
11/17/2014	0	95.22
12/26/2014	0	95.35
1/26/2015	0	95.57
2/9/2015	263	96.98
3/3/2015	0	95.70
4/13/2015	0	94.57
5/29/2015	219	92.47
6/26/2015	0	90.86
7/22/2015	487	89.41
8/18/2015	178	88.40
10/7/2015	0	92.89
11/10/2015	23	95.94
3/9/2016	0	91.32
4/1/2016	42	89.71
5/7/2016	26	91.95
6/23/2016	165	89.38
7/22/2016	158	88.27
8/22/2016	122	90.80
9/14/2016	380	90.45
10/18/2016	435	91.34
11/27/2016	2	94.76
1/11/2017	48	93.59
2/20/2017	0	94.22
3/13/2017	0	98.48
3/29/2017	0	96.18
4/13/2017	0	93.58
5/3/2017	0	90.97
6/6/2017	58	90.34
7/21/2017	38	90.25
8/16/2017	347	89.14
9/5/2017	192	90.26
10/18/2017	407	92.39
11/20/2017	220	94.70
2/21/2018	55	91.79
3/23/2018	150	92.36
4/24/2018	0	94.56
5/16/2018	70	90.56
6/19/2018	0	90.06
8/23/2018	150	92.36
9/17/2018	70	90.50
10/18/2018	0	94.25
12/3/2018	0	92.77
1/4/2019	0	95.16

* = As determined through field PID screening of airstream

Table 2
Summary of Groundwater Gauging and Elevation Data
Dambrose Cleaners
1517 Van Vranken Avenue
Schenectady, NY

Monitoring Well ID	Top of Casing Elevation	Depth to Water From Top of Casing	Watertable Elevation
		8/22/2017	
MW-1R	200.07	6.61	193.46
MW-2R	199.56	6.45	193.11
MW-3	202.91	6.35	196.56
MW-4	193.47	1.49	191.98
MW-5	197.78	-	-
MW-6	191.10	6.05	185.05
MW-7	195.04	3.45	191.59
MW-8	190.43	-	-
MW-9	190.99	-	-
MW-10	191.17	4.96	186.21
MW-11	200.13	-	-

All Values are expressed in feet
Survey by others

Table 3
Groundwater Sampling Results
Dambrose Cleaners
1517 Van Vranken Avenue
Schenectady, NY

Groundwater Analytical Summary							
Parameter	Sample Designation						
	MW-1R	MW-2R	MW-3	MW-4	MW-6	MW-7	MW-10
pH	5.97	5.97	6.17	6.16	7.53	6.16	6.15
Temp (°C)	15.44	17.75	18.93	17.26	15.72	15.97	16.43
TDS (g/l)	0.46	0.69	0.89	0.47	1.05	0.30	0.49
Disolved Oxygen (mg/L)	1.12	7.60	5.28	1.76	11.01	9.51	14.20
Turbidity (NTU)	7.40	0.90	12.70	70.00	359.00	-	496.00
ORP (mV)	-178	27	113	-100	-204	-82	-89
Conductivity (mS/cm)	0.71	1.09	1.59	0.73	1.75	0.46	0.75
NOTES: - Parameters observed prior to sampling - NA = No parameters taken (metal only samples) - DMG = Well damaged, no samples or parameters taken - Samples obtained on August 22, 2018							

Table 4
Groundwater Sampling Results - Site Specific VOCs
Dambrose Cleaners
1517 Van Vranken Avenue
Schenectady, NY

Parameter	MONITORING WELL/SAMPLE IDENTIFICATION								NYS DEC
	MW-1R	MW-2R	DUPLICATE (MW-2R)	MW-3	MW-4	MW-6	MW-7	MW-10	Groundwater Standards
Volatile Organic Compounds (Method 8260)									
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	10
1,1,2,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	0.7
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	5
1,2-Dibromo-3-Chloropropane	ND	ND	ND	ND	ND	ND	ND	ND	0.04
1,2-Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	-
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	3
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	0.6
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	1
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	3
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	-
2-Butanone (MEK)	ND	ND	ND	ND	ND	ND	ND	ND	-
4-Methyl-2-pentanone (MIBK)	ND	ND	ND	ND	ND	ND	ND	ND	-
Acetone	ND	ND	ND	ND	ND	ND	3.7 J	7.5 J	-
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	0.7
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	-
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	-
Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	5
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	0.21 J	60
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND	5
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	-
Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	5
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	7
Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	-
cis-1,2-Dichloroethene	1.5	21	20	ND	15	ND	ND	ND	5
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	0.4
Cyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	-
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	5
Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	5
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	5
Methyl acetate	ND	ND	ND	ND	ND	ND	ND	ND	-
MTBE	ND	ND	ND	ND	ND	ND	ND	ND	10
Methylcyclohexane	ND	ND	ND	ND	ND	ND	ND	ND	-
Methylene Chloride	ND	ND	ND	ND	ND	ND	ND	ND	5
Styrene	ND	ND	ND	ND	ND	ND	ND	ND	5
Tetrachloroethene	ND	190	180	ND	20	0.42 J	ND	ND	5
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	5
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	5
Trichloroethene	ND	27	24	ND	5	ND	ND	ND	5
Vinyl chloride	3.3	ND	ND	ND	4	ND	ND	ND	2
m & p - Xylene	ND	ND	ND	ND	ND	ND	ND	ND	5
o-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	5
Xylenes (Total)	ND	ND	ND	ND	ND	ND	ND	ND	5

Samples collected on August 22 ,2018

All Values are Reported in ug/L (parts per billion - ppb)

ND = Not Detected

J - Result is less than the RL but greater than or equal to the MDL. Concentration is an approximate value.

Analytical Facility - Test America - Buffalo

Highlighted values equal or exceed NYSDEC groundwater standards.

Table 5
Groundwater Sampling Results - Emerging Contaminants
Dambrose Cleaners
1517 Van Vranken Avenue
Schenectady, NY

Compound	Site Sample Locations								QA/QC Samples		NYSDEC Internal Screening Levels (Until EC Standards are Finalized)
	MW-1R	MW-2R	DUPLICATE (MW-2R)	MW-3	MW-4	MW-6	MW-7	MW-10	Field Blank	Equipment Blank	
Sample Date	8-22-18	8-22-18	8-22-19	8-22-18	8-22-18	8-22-18	8-22-18	8-22-18	8-22-18	8-22-18	
Semivolatile Organic Compounds (Method 8270 SIM)											
1,4-Dioxane	190 J	ND	ND	ND	ND	ND	ND	ND	N/A	N/A	1,000
Perfluorinated Alkyl Substances (Method 537, 1.1 Modified)											
6:2-Fts	ND	ND	4 J	ND	300	9.2 J	1,300	130	1.7 J	ND	100
8:2-Fts	ND	ND	ND	ND	ND	ND	2 J	ND	ND	ND	100
N-ethyl perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
N-methyl perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Perfluorobutanesulfonic Acid (PFBS)	2.9	8.2	7.7	18	8.2	1.2 J	33	4	ND	ND	100
Perfluorobutanoic Acid (PFBA)	6	12	10	5.4	11.0	1.2 J	11	5.2	0.50 J	0.72 J	100
Perfluorodecanesulfonic acid (PFDS)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Perfluorodecanoic acid (PFDA)	0.47 J	1.9	1.6	0.30 J	0.36 J	ND	2.6	0.25 J	ND	ND	100
Perfluorododecanoic acid (PFDoA)	ND	ND	ND	ND	ND	ND	1.5 J	ND	ND	ND	100
Perfluoroheptanesulfonic Acid (PFHpS)	ND	0.56 J	0.47 J	ND	0.56 J	ND	1.1 J	ND	ND	ND	100
Perfluoroheptanoic acid (PFHpA)	1.4 J	8.5	7.8	1.8	4.7	0.59 J	6.8	3.3	ND	ND	100
Perfluorohexanesulfonic acid (PFHxS)	0.96 JB	4.7 B	4.3 B	0.80 JB	4.5 B	0.76 JB	4.6 B	4 B	0.26 JB	0.30 JB	100
Perfluorohexanoic acid (PFHxA)	2	9.6	8.2	2.6	6.3	0.95 J	9.1	3.5	ND	ND	100
Perfluorononanoic acid (PFNA)	0.75 J	2.4	2.4	0.57 J	1.2 J	ND	3.7	ND	ND	ND	100
Perfluorooctanesulfonamide (FOSA)	ND	ND	ND	ND	ND	ND	0.36 J	ND	ND	ND	100
Perfluorooctanesulfonic Acid (PFOS)	6	34	31	4.2	24	1.3 J	52	5.8	ND	ND	10
Perfluorooctanoic acid (PFOA)	4.2	17	14	ND	10	1.5 J	17	9.3	ND	ND	10
Perfluoropentanoic acid (PFPeA)	1.2 J	11	10	3.5	7.6	0.98 J	9.4	4	ND	ND	100
Perfluorotetradecanoic acid (PFTeA)	0.32 J	ND	ND	ND	ND	0.29 J	1.4 J	0.26 J	ND	ND	100
Perfluorotridecanoic (PFTriA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
Perfluoroundecanoic acid (PFUnA)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100
EPA Health Advisory Level for Drinking Water (For Comparison, Combined PFOS and PFOA)	10.20	51.00	45.00	4.20	34.00	2.80	69.00	15.10	ND	ND	70.00 PPT
Total PFAS (incl. PFOA/PFOS)	26.2	109.86	101.47	37.17	378.42	17.97	1,455.56	165.61	2.46	1.02	500.00 PPT
NOTES:											
- All results reported in ng/L (Parts Per Trillion, PPT)											
- Analysis performed by TestAmerica Environmental Laboratories, Inc via Eurofins Lancaster Laboratory											
- Highlighted values equal or exceed NYSDEC's Internal "Screening Levels"											
- ND = Not Detected above method detection limit											

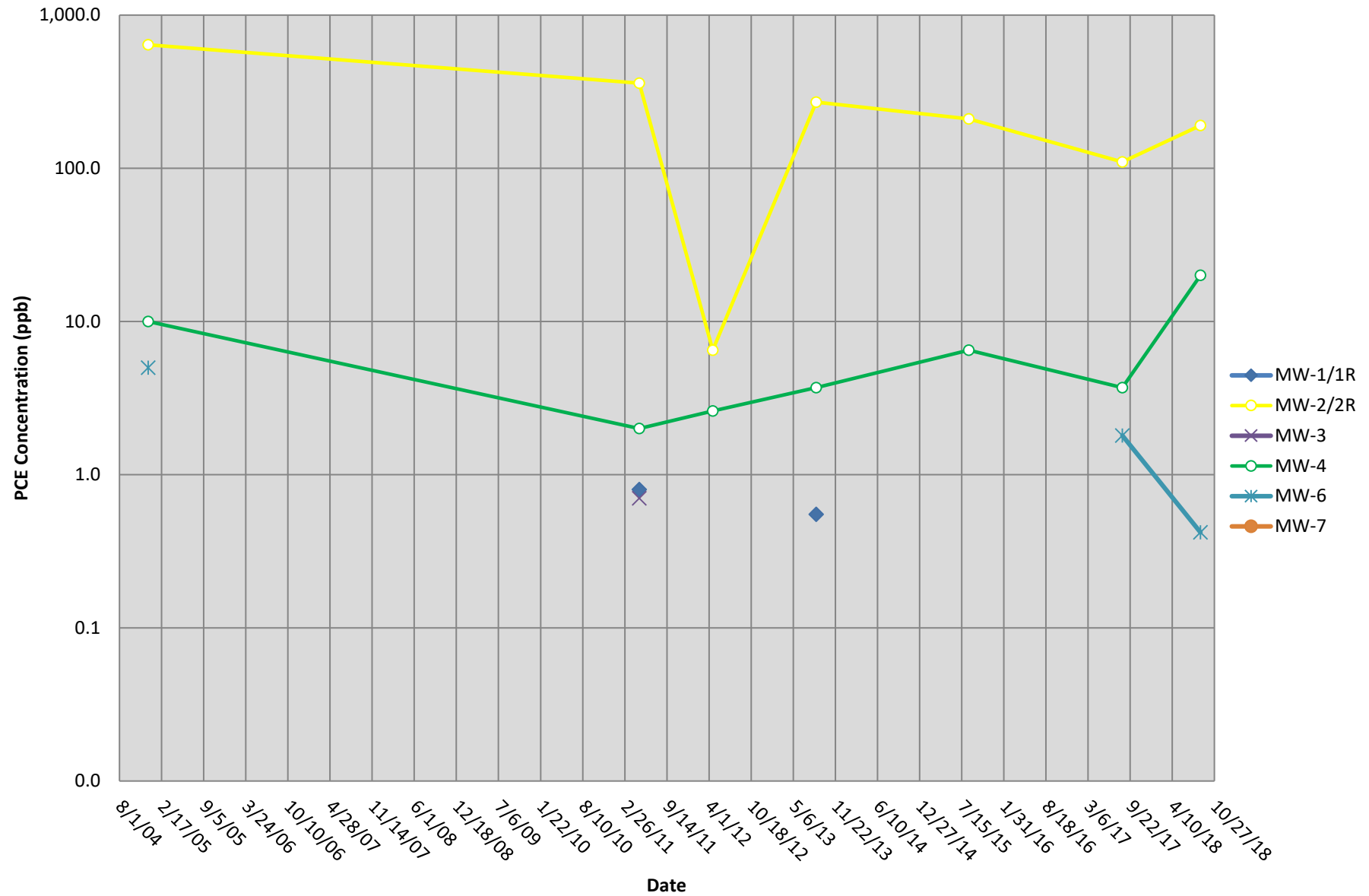
Table 6
Summary of PCE in Groundwater Overtime
Dambrose Cleaners
1517 Vasn Vranken Avenue
Schenectady, NY

Historical Groundwater Analytical Summary												
Parameter	Sampling Date	Sample Point										
		MW-1/1R	MW-2/2R	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11
PCE	12/15/04	0.0	640.0	0.0	10.0	0.0	5.0	0.0	0.0	0.0	0.0	0.0
	5/6/11	0.8	360.0	0.7	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4/19/12	0.0	6.5	0.0	2.6	-	0.0	0.0	-	-	0.0	-
	8/23/13	0.55	270.0	0.0	3.7	-	0.0	0.0	-	-	0.0	-
	8/18/15	0.0	210.0	0.0	6.5	-	0.0	0.0	-	-	-	-
	8/16/17	0.0	110.0	0.0	3.7	-	1.8	0.0	-	-	0.0	-
	8/22/18	0.0	190.0	0.0	20.0	-	0.42	0.0	-	-	0.0	-
TCE	12/15/04	0.9	54.0	0.0	4.0	0.0	6.0	0.0	0.0	0.0	0.0	0.0
	5/6/11	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4/19/12	0.0	1.4	0.0	0.69	-	0.0	0.0	-	-	0.0	-
	8/23/13	0.0	18.0	0.0	1.2	-	0.0	0.0	-	-	0.0	-
	8/18/15	0.0	14.0	0.0	4.8	-	0.0	0.0	-	-	-	-
	8/16/17	0.0	8.6	0.0	1.2	-	1.2	0.0	-	-	0.0	-
	8/22/18	0.0	27.0	0.0	5.0	-	0.00	0.0	-	-	0.0	-
cis-1,2-DCE	12/15/04	45.0	56.0	0.0	21.0	0.0	70.0	5.0	0.0	0.0	0.0	0.0
	5/6/11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4/19/12	9.8	5.0	0.0	4.3	-	33.0	0.86	-	-	0.0	-
	8/23/13	8.6	22.0	0.0	3.9	-	27.0	0.0	-	-	0.0	-
	8/18/15	3.1	21.0	0.0	14.0	-	21.0	0.0	-	-	-	-
	8/16/17	1.8	11.0	0.0	4.2	-	49.0	0.83	-	-	0.0	-
	8/22/18	1.5	21.0	0.0	15.0	-	0.00	0.0	-	-	0.0	-
Vinyl Chloride	12/15/04	110.0	0.0	0.0	9.0	0.0	0.7	5.0	0.0	0.0	0.0	0.0
	5/6/11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	4/19/12	9.4	5.2	0.0	1.4	-	0.0	0.0	-	-	0.0	-
	8/23/13	12.00	0.0	0.0	0.0	-	0.0	0.0	-	-	0.0	-
	8/18/15	6.1	0.0	0.0	4.5	-	0.0	0.0	-	-	-	-
	8/16/17	5.5	0.0	0.0	1.6	-	0.0	0.0	-	-	0.0	-
	8/22/18	3.3	0.0	0.0	4.0	-	0.0	0.0	-	-	0.0	-

NOTES:

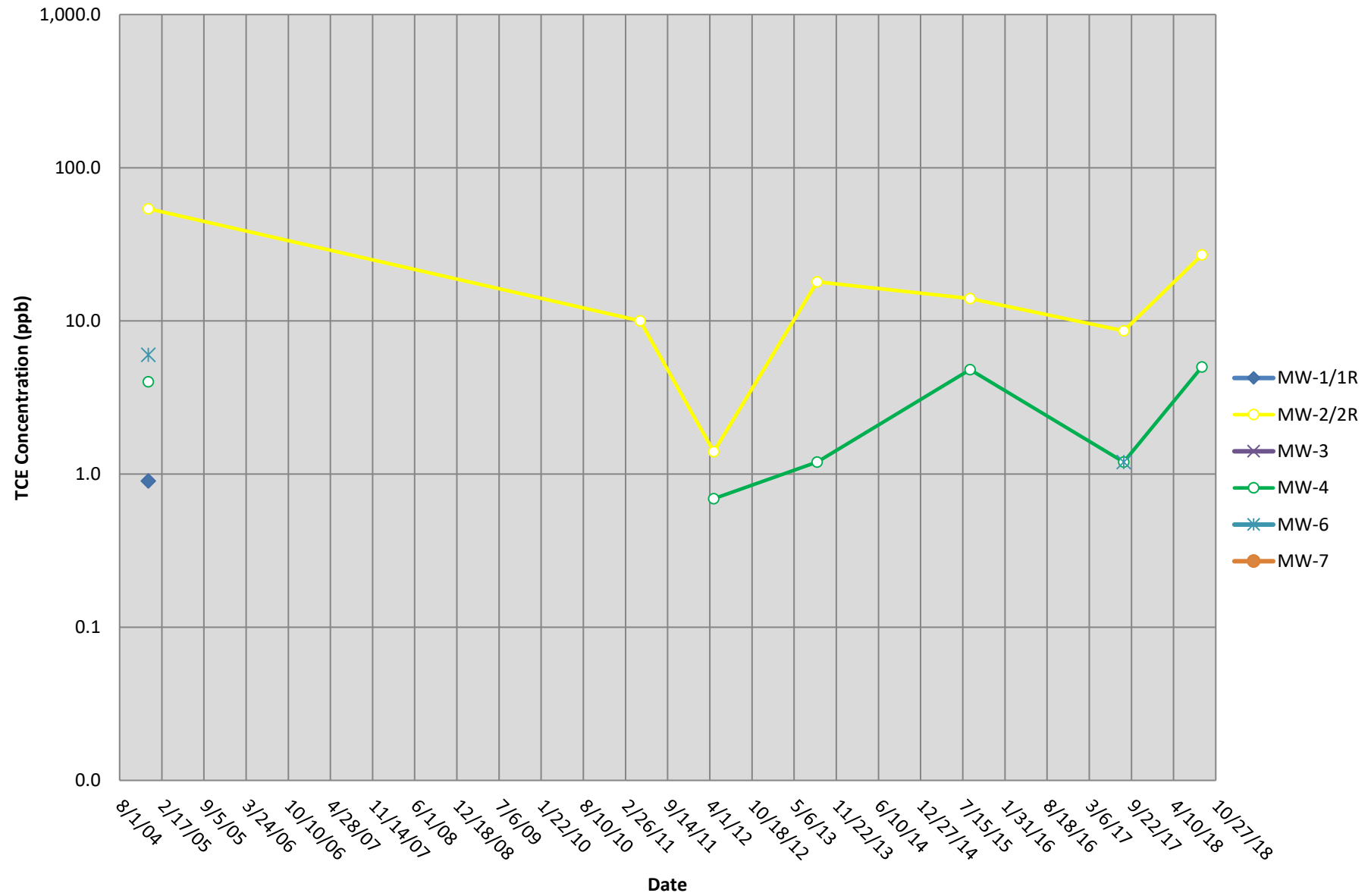
- All results reported in ug/L

Graph 1: PCE Concentrations in Groundwater Over Time
Dambrose Cleaners Site, NYSDEC Site No.: 447030



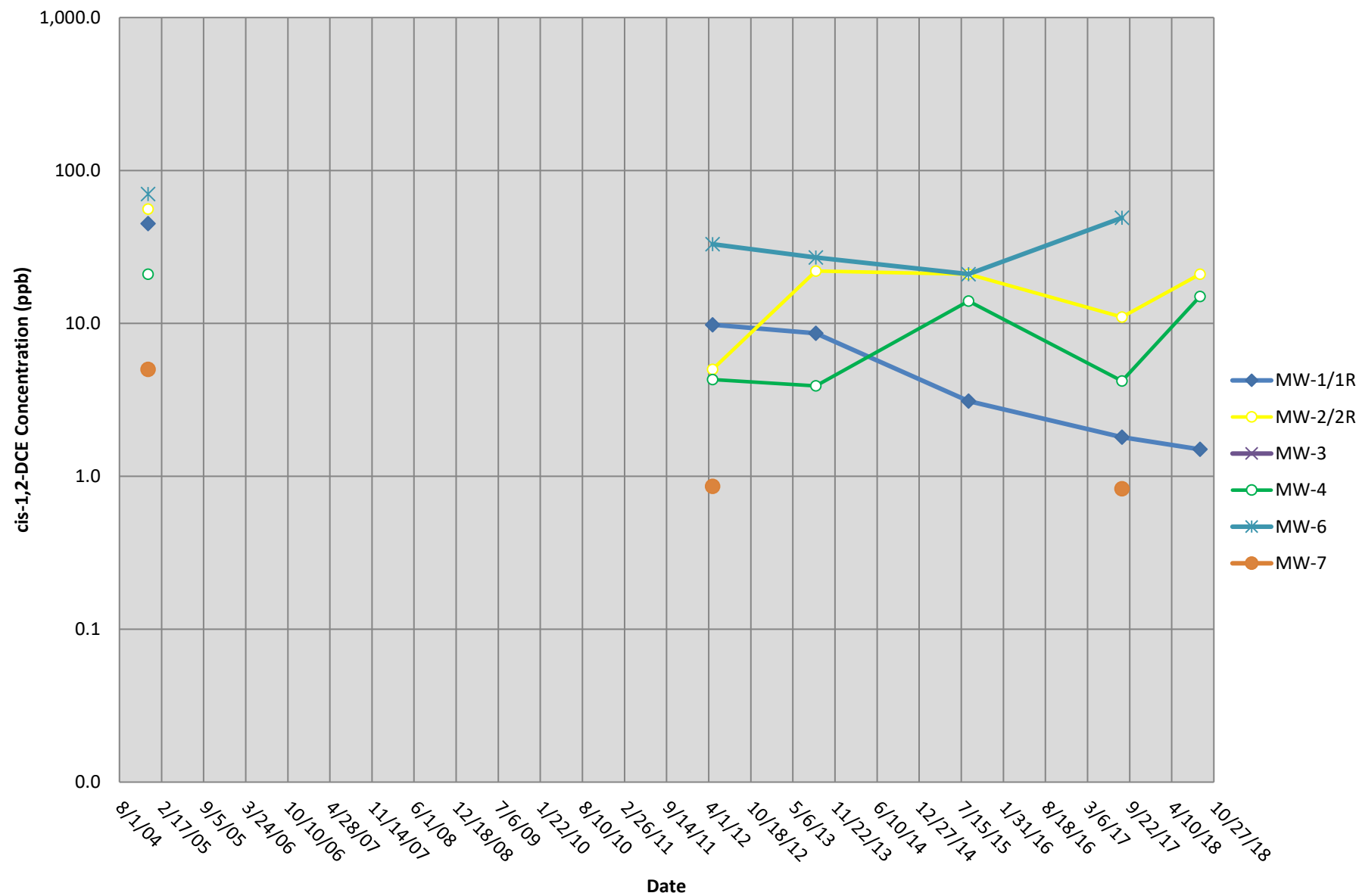
Graph 2: TCE Concentrations in Groundwater Over Time

Dambrose Cleaners Site, NYSDEC Site No.: 447030



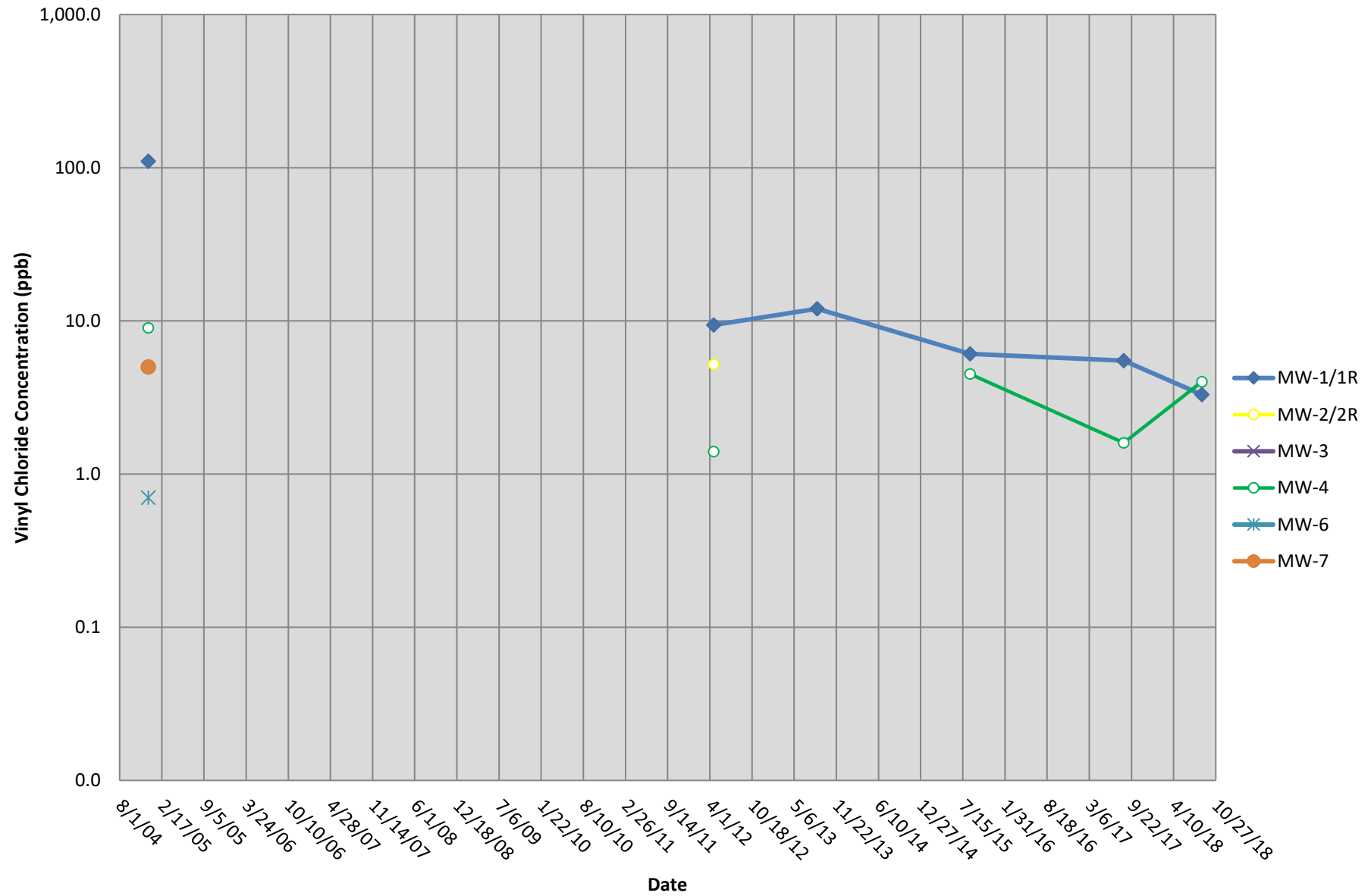
Graph 3: cis-1,2-DCE Concentrations in Groundwater Over Time

Dambrose Cleaners Site, NYSDEC Site No.: 447030



Graph 4: Vinyl Chloride Concentrations in Groundwater Over Time

Dambrose Cleaners Site, NYSDEC Site No.: 447030



ATTACHMENT - 1
PFAS Sampling Checklist

PFAS Sampling Checklist

Date: 8/22/18

Weather (temp/precipitation): SCATTERY RAIN Site Name: FORMER DANGROVE CLEANERS

Field Clothing and PPE:

- ☒ No clothing or boots containing Gore-Tex™
- ☒ All safety boots made from polyurethane and PVC
- ☒ No materials containing Tyvek®
- ☒ Field crew has not used fabric softener on clothing
- ☒ Field crew has not used cosmetics, moisturizers, hand cream, or other related products this morning
- ☒ Field crew has not applied unauthorized sunscreen or insect repellent

Field Equipment:

- ☒ No Teflon® or LDPE containing materials on-site
- ☒ All sample materials made from stainless steel, HDPE, acetate, silicon, or polypropylene
- ☒ No waterproof field books on-site
- ☒ No plastic clipboards, binders, or spiral hard cover notebooks on-site

- ☒ Coolers filled with regular ice only. No chemical (blue) ice packs in possession

Sample Containers:

- ☒ All sample containers made of HDPE or polypropylene
- ☒ Caps are unlined and made of HDPE or polypropylene

Wet Weather (as applicable):

- ☒ Wet weather gear made of polyurethane and PVC only

Equipment Decontamination:

- ☒ "PFC-free" water on-site for decontamination of sample equipment. No other water sources to be used.
- ☒ Alconox and Liquinox to be used as decontamination materials

Food Considerations:

- ☒ No food or drink on-site with exception of bottled water and/or hydration drinks (i.e., Gatorade and Powerade) that is available for consumption only in the staging area

If any applicable boxes cannot be checked, the Field Lead shall describe the noncompliance issues below and work with field personnel to address noncompliance issues prior to commencement of that day's work. Corrective action shall include removal of noncompliance items from the site or removal of worker offsite until in compliance.

Describe the noncompliance issues (include personnel not in compliance) and action/outcome of noncompliance:

CHECKED ALL RAIN GEAR, NO POLYESTER IN USE, PVC ONLY!

COMPLETE COMPLIANCE NOTES AND RECORDED.

Field Lead Name: JOHNATHAN M ROBINSON

Field Lead Signature: Johnathan M Robinson Time: 8:45

ATTACHMENT - 2
Laboratory Analytical Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228-2298

Tel: (716)691-2600

TestAmerica Job ID: 480-140808-1

Client Project/Site: DEC Dambrose Cleaners #447030

For:

Precision Environmental Services Inc.

831 State Route 67

Ste 38

Ballston Spa, New York 12020

Attn: Stephen Phelps



Authorized for release by:

9/10/2018 10:59:21 AM

Judy Stone, Senior Project Manager

(484)685-0868

judy.stone@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1

2

3

4

5

6

7

8

9

10

11

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Lab Chronicle	26
Certification Summary	29
Method Summary	30
Sample Summary	31
Chain of Custody	32
Receipt Checklists	34



Definitions/Glossary

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Job ID: 480-140808-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-140808-1

Receipt

The samples were received on 8/24/2018 1:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.7° C and 1.0° C.

Receipt Exceptions

Buffalo did not receive vials for the VOA MS/MSD; the 8260 analysis was cancelled for these.

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): MW-3 (480-140808-1), MW-1R (480-140808-2), MW-1R (480-140808-2[MS]), MW-1R (480-140808-2[MSD]), MW-2R (480-140808-3), DUPLICATE (480-140808-4), MW-10 (480-140808-5), MW-4 (480-140808-6), EQUIPMENT BLANK (480-140808-7), MW-7 (480-140808-8), FIELD BLANK (480-140808-9) and MW-6 (480-140808-10). None of the PFC 250ml containers had sample times listed on labels (Samples# 1-10), while each sample should have its own Sample Time as listed on COC. Samples were labeled according to COC.

GC/MS VOA

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-2R (480-140808-3) and DUPLICATE (480-140808-4). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-431413 recovered above the upper control limit for Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analyte, therefore, the data have been reported. The following samples are impacted: MW-3 (480-140808-1), MW-1R (480-140808-2), MW-2R (480-140808-3), DUPLICATE (480-140808-4), MW-10 (480-140808-5), MW-4 (480-140808-6), MW-7 (480-140808-8) and MW-6 (480-140808-10).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA

Method(s) 8270D SIM ID: The following samples were diluted due to color: MW-3 (480-140808-1), MW-7 (480-140808-8) and MW-6 (480-140808-10). Elevated reporting limits (RL) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS

Method(s) 537 (modified): Results for samples MW-4 (480-140808-6) and MW-7 (480-140808-8) were reported from the analysis of a diluted extract due to high concentration of the target analyte in the analysis of the undiluted extract. The dilution factor was applied to the labeled internal standard area counts and these area counts were within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method(s) 3535: The following samples had non-settleable particulate matter which plugged the SPE extraction disk: MW-1R (480-140808-2), MW-1R (480-140808-2[MS]), MW-1R (480-140808-2[MSD]), MW-10 (480-140808-5), MW-4 (480-140808-6), MW-7 (480-140808-8) and MW-6 (480-140808-10). The amount of sample remaining plus the weight of the bottle are recorded in the "Notes" field of the prep batch. The "Tare Weight" recorded is the weight of the emptied bottle.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-3
Date Collected: 08/22/18 09:40
Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/24/18 22:23	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/24/18 22:23	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/24/18 22:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/24/18 22:23	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/24/18 22:23	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/24/18 22:23	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/24/18 22:23	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/24/18 22:23	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/24/18 22:23	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/24/18 22:23	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/24/18 22:23	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/24/18 22:23	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/24/18 22:23	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/24/18 22:23	1
2-Hexanone	ND		5.0	1.2	ug/L			08/24/18 22:23	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/24/18 22:23	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/24/18 22:23	1
Acetone	ND		10	3.0	ug/L			08/24/18 22:23	1
Benzene	ND		1.0	0.41	ug/L			08/24/18 22:23	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/24/18 22:23	1
Bromoform	ND		1.0	0.26	ug/L			08/24/18 22:23	1
Bromomethane	ND		1.0	0.69	ug/L			08/24/18 22:23	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/24/18 22:23	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/24/18 22:23	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/24/18 22:23	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/24/18 22:23	1
Chloroethane	ND		1.0	0.32	ug/L			08/24/18 22:23	1
Chloroform	ND		1.0	0.34	ug/L			08/24/18 22:23	1
Chloromethane	ND		1.0	0.35	ug/L			08/24/18 22:23	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/24/18 22:23	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/24/18 22:23	1
Cyclohexane	ND		1.0	0.18	ug/L			08/24/18 22:23	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/24/18 22:23	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/24/18 22:23	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/24/18 22:23	1
Methyl acetate	ND		2.5	1.3	ug/L			08/24/18 22:23	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/24/18 22:23	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/24/18 22:23	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/24/18 22:23	1
Styrene	ND		1.0	0.73	ug/L			08/24/18 22:23	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/24/18 22:23	1
Toluene	ND		1.0	0.51	ug/L			08/24/18 22:23	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/24/18 22:23	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/24/18 22:23	1
Trichloroethene	ND		1.0	0.46	ug/L			08/24/18 22:23	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/24/18 22:23	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/24/18 22:23	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/24/18 22:23	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-3

Date Collected: 08/22/18 09:40

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-1

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		08/24/18 22:23	1
Toluene-d8 (Surr)	100		80 - 120		08/24/18 22:23	1
4-Bromofluorobenzene (Surr)	100		73 - 120		08/24/18 22:23	1
Dibromofluoromethane (Surr)	96		75 - 123		08/24/18 22:23	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1.0	0.50	ug/L		08/25/18 08:02	09/01/18 07:09	5
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	25		15 - 110				08/25/18 08:02	09/01/18 07:09	5

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	5.4		1.6	0.28	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluoropentanoic acid (PFPeA)	3.5		1.6	0.40	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluorohexanoic acid (PFHxA)	2.6		1.6	0.47	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluoroheptanoic acid (PFHpA)	1.8		1.6	0.20	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluorooctanoic acid (PFOA)	ND		1.6	0.69	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluorononanoic acid (PFNA)	0.57	J	1.6	0.22	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluorodecanoic acid (PFDA)	0.30	J	1.6	0.25	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.90	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.45	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.6	1.1	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.24	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluorobutanesulfonic acid (PFBS)	18		1.6	0.16	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluorohexanesulfonic acid (PFHxS)	0.80	J B	1.6	0.14	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.15	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluorooctanesulfonic acid (PFOS)	4.2		1.6	0.44	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.26	ng/L		09/05/18 08:07	09/05/18 17:45	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.6	0.28	ng/L		09/05/18 08:07	09/05/18 17:45	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		16	2.5	ng/L		09/05/18 08:07	09/05/18 17:45	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		16	1.5	ng/L		09/05/18 08:07	09/05/18 17:45	1
6:2 FTS	ND		16	1.6	ng/L		09/05/18 08:07	09/05/18 17:45	1
8:2 FTS	ND		16	1.6	ng/L		09/05/18 08:07	09/05/18 17:45	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	81		25 - 150				09/05/18 08:07	09/05/18 17:45	1
13C5 PFPeA	88		25 - 150				09/05/18 08:07	09/05/18 17:45	1
13C2 PFHxA	91		25 - 150				09/05/18 08:07	09/05/18 17:45	1
13C4-PFHpA	94		25 - 150				09/05/18 08:07	09/05/18 17:45	1
13C4 PFOA	95		25 - 150				09/05/18 08:07	09/05/18 17:45	1
13C5 PFNA	92		25 - 150				09/05/18 08:07	09/05/18 17:45	1
13C2 PFDA	98		25 - 150				09/05/18 08:07	09/05/18 17:45	1
13C2 PFUnA	98		25 - 150				09/05/18 08:07	09/05/18 17:45	1
13C2 PFDoA	84		25 - 150				09/05/18 08:07	09/05/18 17:45	1
13C2-PFTeDA	81		25 - 150				09/05/18 08:07	09/05/18 17:45	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-3

Date Collected: 08/22/18 09:40

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-1

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C3-PFBS	91		25 - 150	09/05/18 08:07	09/05/18 17:45	1
18O2 PFHxS	101		25 - 150	09/05/18 08:07	09/05/18 17:45	1
13C4 PFOS	93		25 - 150	09/05/18 08:07	09/05/18 17:45	1
13C8 FOSA	89		25 - 150	09/05/18 08:07	09/05/18 17:45	1
d3-NMeFOSAA	90		25 - 150	09/05/18 08:07	09/05/18 17:45	1
d5-NEtFOSAA	90		25 - 150	09/05/18 08:07	09/05/18 17:45	1
M2-6:2FTS	106		25 - 150	09/05/18 08:07	09/05/18 17:45	1
M2-8:2FTS	84		25 - 150	09/05/18 08:07	09/05/18 17:45	1

Client Sample ID: MW-1R

Date Collected: 08/22/18 10:35

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/24/18 22:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/24/18 22:46	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/24/18 22:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/24/18 22:46	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/24/18 22:46	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/24/18 22:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/24/18 22:46	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/24/18 22:46	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/24/18 22:46	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/24/18 22:46	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/24/18 22:46	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/24/18 22:46	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/24/18 22:46	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/24/18 22:46	1
2-Hexanone	ND		5.0	1.2	ug/L			08/24/18 22:46	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/24/18 22:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/24/18 22:46	1
Acetone	ND		10	3.0	ug/L			08/24/18 22:46	1
Benzene	ND		1.0	0.41	ug/L			08/24/18 22:46	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/24/18 22:46	1
Bromoform	ND		1.0	0.26	ug/L			08/24/18 22:46	1
Bromomethane	ND		1.0	0.69	ug/L			08/24/18 22:46	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/24/18 22:46	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/24/18 22:46	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/24/18 22:46	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/24/18 22:46	1
Chloroethane	ND		1.0	0.32	ug/L			08/24/18 22:46	1
Chloroform	ND		1.0	0.34	ug/L			08/24/18 22:46	1
Chloromethane	ND		1.0	0.35	ug/L			08/24/18 22:46	1
cis-1,2-Dichloroethene	1.5		1.0	0.81	ug/L			08/24/18 22:46	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/24/18 22:46	1
Cyclohexane	ND		1.0	0.18	ug/L			08/24/18 22:46	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/24/18 22:46	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/24/18 22:46	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/24/18 22:46	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-1R

Date Collected: 08/22/18 10:35

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	ND		2.5	1.3	ug/L			08/24/18 22:46	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/24/18 22:46	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/24/18 22:46	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/24/18 22:46	1
Styrene	ND		1.0	0.73	ug/L			08/24/18 22:46	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/24/18 22:46	1
Toluene	ND		1.0	0.51	ug/L			08/24/18 22:46	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/24/18 22:46	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/24/18 22:46	1
Trichloroethene	ND		1.0	0.46	ug/L			08/24/18 22:46	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/24/18 22:46	1
Vinyl chloride	3.3		1.0	0.90	ug/L			08/24/18 22:46	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/24/18 22:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		08/24/18 22:46	1
Toluene-d8 (Surr)	101		80 - 120		08/24/18 22:46	1
4-Bromofluorobenzene (Surr)	99		73 - 120		08/24/18 22:46	1
Dibromofluoromethane (Surr)	100		75 - 123		08/24/18 22:46	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	0.19	J	0.20	0.10	ug/L		08/25/18 08:02	09/01/18 06:23	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	23		15 - 110				08/25/18 08:02	09/01/18 06:23	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	6.0		1.6	0.28	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluoropentanoic acid (PFPeA)	1.2	J	1.6	0.39	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluorohexanoic acid (PFHxA)	2.0		1.6	0.47	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluoroheptanoic acid (PFHpA)	1.4	J	1.6	0.20	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluorooctanoic acid (PFOA)	4.2		1.6	0.68	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluorononanoic acid (PFNA)	0.75	J	1.6	0.22	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluorodecanoic acid (PFDA)	0.47	J	1.6	0.25	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.89	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.44	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.6	1.0	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluorotetradecanoic acid (PFTeA)	0.32	J	1.6	0.23	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluorobutanesulfonic acid (PFBS)	2.9		1.6	0.16	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluorohexanesulfonic acid (PFHxS)	0.96	J B	1.6	0.14	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.15	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluorooctanesulfonic acid (PFOS)	6.0		1.6	0.43	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.26	ng/L		09/05/18 08:07	09/05/18 17:52	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.6	0.28	ng/L		09/05/18 08:07	09/05/18 17:52	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-1R

Date Collected: 08/22/18 10:35

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-2

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		16	2.5	ng/L		09/05/18 08:07	09/05/18 17:52	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		16	1.5	ng/L		09/05/18 08:07	09/05/18 17:52	1
6:2 FTS	ND		16	1.6	ng/L		09/05/18 08:07	09/05/18 17:52	1
8:2 FTS	ND		16	1.6	ng/L		09/05/18 08:07	09/05/18 17:52	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	63		25 - 150				09/05/18 08:07	09/05/18 17:52	1
13C5 PFPeA	76		25 - 150				09/05/18 08:07	09/05/18 17:52	1
13C2 PFHxA	81		25 - 150				09/05/18 08:07	09/05/18 17:52	1
13C4-PFHpA	86		25 - 150				09/05/18 08:07	09/05/18 17:52	1
13C4 PFOA	80		25 - 150				09/05/18 08:07	09/05/18 17:52	1
13C5 PFNA	82		25 - 150				09/05/18 08:07	09/05/18 17:52	1
13C2 PFDA	84		25 - 150				09/05/18 08:07	09/05/18 17:52	1
13C2 PFUnA	81		25 - 150				09/05/18 08:07	09/05/18 17:52	1
13C2 PFDoA	85		25 - 150				09/05/18 08:07	09/05/18 17:52	1
13C2-PFTeDA	77		25 - 150				09/05/18 08:07	09/05/18 17:52	1
13C3-PFBS	81		25 - 150				09/05/18 08:07	09/05/18 17:52	1
18O2 PFHxS	86		25 - 150				09/05/18 08:07	09/05/18 17:52	1
13C4 PFOS	83		25 - 150				09/05/18 08:07	09/05/18 17:52	1
13C8 FOSA	74		25 - 150				09/05/18 08:07	09/05/18 17:52	1
d3-NMeFOSAA	77		25 - 150				09/05/18 08:07	09/05/18 17:52	1
d5-NEtFOSAA	86		25 - 150				09/05/18 08:07	09/05/18 17:52	1
M2-6:2FTS	99		25 - 150				09/05/18 08:07	09/05/18 17:52	1
M2-8:2FTS	81		25 - 150				09/05/18 08:07	09/05/18 17:52	1

Client Sample ID: MW-2R

Date Collected: 08/22/18 11:10

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			08/24/18 23:10	2
1,1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			08/24/18 23:10	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			08/24/18 23:10	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			08/24/18 23:10	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			08/24/18 23:10	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			08/24/18 23:10	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			08/24/18 23:10	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			08/24/18 23:10	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			08/24/18 23:10	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			08/24/18 23:10	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			08/24/18 23:10	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			08/24/18 23:10	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			08/24/18 23:10	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			08/24/18 23:10	2
2-Hexanone	ND		10	2.5	ug/L			08/24/18 23:10	2
2-Butanone (MEK)	ND		20	2.6	ug/L			08/24/18 23:10	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			08/24/18 23:10	2
Acetone	ND		20	6.0	ug/L			08/24/18 23:10	2

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-2R

Date Collected: 08/22/18 11:10

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0	0.82	ug/L			08/24/18 23:10	2
Bromodichloromethane	ND		2.0	0.78	ug/L			08/24/18 23:10	2
Bromoform	ND		2.0	0.52	ug/L			08/24/18 23:10	2
Bromomethane	ND		2.0	1.4	ug/L			08/24/18 23:10	2
Carbon disulfide	ND		2.0	0.38	ug/L			08/24/18 23:10	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			08/24/18 23:10	2
Chlorobenzene	ND		2.0	1.5	ug/L			08/24/18 23:10	2
Dibromochloromethane	ND		2.0	0.64	ug/L			08/24/18 23:10	2
Chloroethane	ND		2.0	0.64	ug/L			08/24/18 23:10	2
Chloroform	ND		2.0	0.68	ug/L			08/24/18 23:10	2
Chloromethane	ND		2.0	0.70	ug/L			08/24/18 23:10	2
cis-1,2-Dichloroethene	21		2.0	1.6	ug/L			08/24/18 23:10	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			08/24/18 23:10	2
Cyclohexane	ND		2.0	0.36	ug/L			08/24/18 23:10	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			08/24/18 23:10	2
Ethylbenzene	ND		2.0	1.5	ug/L			08/24/18 23:10	2
Isopropylbenzene	ND		2.0	1.6	ug/L			08/24/18 23:10	2
Methyl acetate	ND		5.0	2.6	ug/L			08/24/18 23:10	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			08/24/18 23:10	2
Methylcyclohexane	ND		2.0	0.32	ug/L			08/24/18 23:10	2
Methylene Chloride	ND		2.0	0.88	ug/L			08/24/18 23:10	2
Styrene	ND		2.0	1.5	ug/L			08/24/18 23:10	2
Tetrachloroethene	190		2.0	0.72	ug/L			08/24/18 23:10	2
Toluene	ND		2.0	1.0	ug/L			08/24/18 23:10	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			08/24/18 23:10	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			08/24/18 23:10	2
Trichloroethene	27		2.0	0.92	ug/L			08/24/18 23:10	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			08/24/18 23:10	2
Vinyl chloride	ND		2.0	1.8	ug/L			08/24/18 23:10	2
Xylenes, Total	ND		4.0	1.3	ug/L			08/24/18 23:10	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		77 - 120		08/24/18 23:10	2
Toluene-d8 (Surr)	99		80 - 120		08/24/18 23:10	2
4-Bromofluorobenzene (Surr)	97		73 - 120		08/24/18 23:10	2
Dibromofluoromethane (Surr)	98		75 - 123		08/24/18 23:10	2

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		08/25/18 08:02	09/01/18 07:32	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	29		15 - 110				08/25/18 08:02	09/01/18 07:32	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	12		1.6	0.28	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluoropentanoic acid (PFPeA)	11		1.6	0.39	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluorohexanoic acid (PFHxA)	9.6		1.6	0.46	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluoroheptanoic acid (PFHpA)	8.5		1.6	0.20	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluorooctanoic acid (PFOA)	17		1.6	0.67	ng/L		09/05/18 08:07	09/05/18 18:15	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-2R

Date Collected: 08/22/18 11:10

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-3

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	2.4		1.6	0.21	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluorodecanoic acid (PFDA)	1.9		1.6	0.24	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.87	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.43	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.6	1.0	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.23	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluorobutanesulfonic acid (PFBS)	8.2		1.6	0.16	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluorohexanesulfonic acid (PFHxS)	4.7	B	1.6	0.13	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.56	J	1.6	0.15	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluorooctanesulfonic acid (PFOS)	34		1.6	0.43	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.25	ng/L		09/05/18 08:07	09/05/18 18:15	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.6	0.28	ng/L		09/05/18 08:07	09/05/18 18:15	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		16	2.4	ng/L		09/05/18 08:07	09/05/18 18:15	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		16	1.5	ng/L		09/05/18 08:07	09/05/18 18:15	1
6:2 FTS	ND		16	1.6	ng/L		09/05/18 08:07	09/05/18 18:15	1
8:2 FTS	ND		16	1.6	ng/L		09/05/18 08:07	09/05/18 18:15	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	70		25 - 150	09/05/18 08:07	09/05/18 18:15	1
13C5 PFPeA	83		25 - 150	09/05/18 08:07	09/05/18 18:15	1
13C2 PFHxA	85		25 - 150	09/05/18 08:07	09/05/18 18:15	1
13C4-PFHpA	85		25 - 150	09/05/18 08:07	09/05/18 18:15	1
13C4 PFOA	86		25 - 150	09/05/18 08:07	09/05/18 18:15	1
13C5 PFNA	88		25 - 150	09/05/18 08:07	09/05/18 18:15	1
13C2 PFDA	86		25 - 150	09/05/18 08:07	09/05/18 18:15	1
13C2 PFUnA	88		25 - 150	09/05/18 08:07	09/05/18 18:15	1
13C2 PFDoA	81		25 - 150	09/05/18 08:07	09/05/18 18:15	1
13C2-PFTeDA	83		25 - 150	09/05/18 08:07	09/05/18 18:15	1
13C3-PFBS	82		25 - 150	09/05/18 08:07	09/05/18 18:15	1
18O2 PFHxS	85		25 - 150	09/05/18 08:07	09/05/18 18:15	1
13C4 PFOS	82		25 - 150	09/05/18 08:07	09/05/18 18:15	1
13C8 FOSA	81		25 - 150	09/05/18 08:07	09/05/18 18:15	1
d3-NMeFOSAA	82		25 - 150	09/05/18 08:07	09/05/18 18:15	1
d5-NEtFOSAA	90		25 - 150	09/05/18 08:07	09/05/18 18:15	1
M2-6:2FTS	107		25 - 150	09/05/18 08:07	09/05/18 18:15	1
M2-8:2FTS	87		25 - 150	09/05/18 08:07	09/05/18 18:15	1

Client Sample ID: DUPLICATE

Date Collected: 08/22/18 11:20

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			08/24/18 23:33	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			08/24/18 23:33	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			08/24/18 23:33	2

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: DUPLICATE

Lab Sample ID: 480-140808-4

Date Collected: 08/22/18 11:20

Matrix: Water

Date Received: 08/24/18 01:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			08/24/18 23:33	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			08/24/18 23:33	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			08/24/18 23:33	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			08/24/18 23:33	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			08/24/18 23:33	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			08/24/18 23:33	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			08/24/18 23:33	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			08/24/18 23:33	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			08/24/18 23:33	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			08/24/18 23:33	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			08/24/18 23:33	2
2-Hexanone	ND		10	2.5	ug/L			08/24/18 23:33	2
2-Butanone (MEK)	ND		20	2.6	ug/L			08/24/18 23:33	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			08/24/18 23:33	2
Acetone	ND		20	6.0	ug/L			08/24/18 23:33	2
Benzene	ND		2.0	0.82	ug/L			08/24/18 23:33	2
Bromodichloromethane	ND		2.0	0.78	ug/L			08/24/18 23:33	2
Bromoform	ND		2.0	0.52	ug/L			08/24/18 23:33	2
Bromomethane	ND		2.0	1.4	ug/L			08/24/18 23:33	2
Carbon disulfide	ND		2.0	0.38	ug/L			08/24/18 23:33	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			08/24/18 23:33	2
Chlorobenzene	ND		2.0	1.5	ug/L			08/24/18 23:33	2
Dibromochloromethane	ND		2.0	0.64	ug/L			08/24/18 23:33	2
Chloroethane	ND		2.0	0.64	ug/L			08/24/18 23:33	2
Chloroform	ND		2.0	0.68	ug/L			08/24/18 23:33	2
Chloromethane	ND		2.0	0.70	ug/L			08/24/18 23:33	2
cis-1,2-Dichloroethene	20		2.0	1.6	ug/L			08/24/18 23:33	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			08/24/18 23:33	2
Cyclohexane	ND		2.0	0.36	ug/L			08/24/18 23:33	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			08/24/18 23:33	2
Ethylbenzene	ND		2.0	1.5	ug/L			08/24/18 23:33	2
Isopropylbenzene	ND		2.0	1.6	ug/L			08/24/18 23:33	2
Methyl acetate	ND		5.0	2.6	ug/L			08/24/18 23:33	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			08/24/18 23:33	2
Methylcyclohexane	ND		2.0	0.32	ug/L			08/24/18 23:33	2
Methylene Chloride	ND		2.0	0.88	ug/L			08/24/18 23:33	2
Styrene	ND		2.0	1.5	ug/L			08/24/18 23:33	2
Tetrachloroethene	180		2.0	0.72	ug/L			08/24/18 23:33	2
Toluene	ND		2.0	1.0	ug/L			08/24/18 23:33	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			08/24/18 23:33	2
trans-1,3-Dichloropropene	ND		2.0	0.74	ug/L			08/24/18 23:33	2
Trichloroethene	24		2.0	0.92	ug/L			08/24/18 23:33	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			08/24/18 23:33	2
Vinyl chloride	ND		2.0	1.8	ug/L			08/24/18 23:33	2
Xylenes, Total	ND		4.0	1.3	ug/L			08/24/18 23:33	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		77 - 120		08/24/18 23:33	2
Toluene-d8 (Surr)	102		80 - 120		08/24/18 23:33	2
4-Bromofluorobenzene (Surr)	101		73 - 120		08/24/18 23:33	2

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: DUPLICATE

Lab Sample ID: 480-140808-4

Date Collected: 08/22/18 11:20

Matrix: Water

Date Received: 08/24/18 01:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	103		75 - 123		08/24/18 23:33	2

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		08/25/18 08:02	09/01/18 07:56	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	28		15 - 110				08/25/18 08:02	09/01/18 07:56	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	10		1.6	0.28	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluoropentanoic acid (PFPeA)	10		1.6	0.40	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluorohexanoic acid (PFHxA)	8.2		1.6	0.47	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluoroheptanoic acid (PFHpA)	7.8		1.6	0.20	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluorooctanoic acid (PFOA)	14		1.6	0.69	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluorononanoic acid (PFNA)	2.4		1.6	0.22	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluorodecanoic acid (PFDA)	1.6		1.6	0.25	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.89	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.45	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.6	1.1	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.23	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluorobutanesulfonic acid (PFBS)	7.7		1.6	0.16	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluorohexanesulfonic acid (PFHxS)	4.3 B		1.6	0.14	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.47 J		1.6	0.15	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluorooctanesulfonic acid (PFOS)	31		1.6	0.44	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.26	ng/L		09/05/18 08:07	09/05/18 18:22	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.6	0.28	ng/L		09/05/18 08:07	09/05/18 18:22	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		16	2.5	ng/L		09/05/18 08:07	09/05/18 18:22	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		16	1.5	ng/L		09/05/18 08:07	09/05/18 18:22	1
6:2 FTS	4.0 J		16	1.6	ng/L		09/05/18 08:07	09/05/18 18:22	1
8:2 FTS	ND		16	1.6	ng/L		09/05/18 08:07	09/05/18 18:22	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	79		25 - 150	09/05/18 08:07	09/05/18 18:22	1
13C5 PFPeA	88		25 - 150	09/05/18 08:07	09/05/18 18:22	1
13C2 PFHxA	95		25 - 150	09/05/18 08:07	09/05/18 18:22	1
13C4-PFHpA	92		25 - 150	09/05/18 08:07	09/05/18 18:22	1
13C4 PFOA	94		25 - 150	09/05/18 08:07	09/05/18 18:22	1
13C5 PFNA	91		25 - 150	09/05/18 08:07	09/05/18 18:22	1
13C2 PFDA	97		25 - 150	09/05/18 08:07	09/05/18 18:22	1
13C2 PFUnA	95		25 - 150	09/05/18 08:07	09/05/18 18:22	1
13C2 PFDoA	85		25 - 150	09/05/18 08:07	09/05/18 18:22	1
13C2-PFTeDA	87		25 - 150	09/05/18 08:07	09/05/18 18:22	1
13C3-PFBS	91		25 - 150	09/05/18 08:07	09/05/18 18:22	1
18O2 PFHxS	95		25 - 150	09/05/18 08:07	09/05/18 18:22	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: DUPLICATE

Lab Sample ID: 480-140808-4

Date Collected: 08/22/18 11:20

Matrix: Water

Date Received: 08/24/18 01:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOS	89		25 - 150	09/05/18 08:07	09/05/18 18:22	1
13C8 FOSA	90		25 - 150	09/05/18 08:07	09/05/18 18:22	1
d3-NMeFOSAA	90		25 - 150	09/05/18 08:07	09/05/18 18:22	1
d5-NEtFOSAA	94		25 - 150	09/05/18 08:07	09/05/18 18:22	1
M2-6:2FTS	104		25 - 150	09/05/18 08:07	09/05/18 18:22	1
M2-8:2FTS	85		25 - 150	09/05/18 08:07	09/05/18 18:22	1

Client Sample ID: MW-10

Lab Sample ID: 480-140808-5

Date Collected: 08/22/18 12:00

Matrix: Water

Date Received: 08/24/18 01:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/24/18 23:56	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/24/18 23:56	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/24/18 23:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/24/18 23:56	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/24/18 23:56	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/24/18 23:56	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/24/18 23:56	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/24/18 23:56	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/24/18 23:56	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/24/18 23:56	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/24/18 23:56	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/24/18 23:56	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/24/18 23:56	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/24/18 23:56	1
2-Hexanone	ND		5.0	1.2	ug/L			08/24/18 23:56	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/24/18 23:56	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/24/18 23:56	1
Acetone	7.5 J		10	3.0	ug/L			08/24/18 23:56	1
Benzene	ND		1.0	0.41	ug/L			08/24/18 23:56	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/24/18 23:56	1
Bromoform	ND		1.0	0.26	ug/L			08/24/18 23:56	1
Bromomethane	ND		1.0	0.69	ug/L			08/24/18 23:56	1
Carbon disulfide	0.21 J		1.0	0.19	ug/L			08/24/18 23:56	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/24/18 23:56	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/24/18 23:56	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/24/18 23:56	1
Chloroethane	ND		1.0	0.32	ug/L			08/24/18 23:56	1
Chloroform	ND		1.0	0.34	ug/L			08/24/18 23:56	1
Chloromethane	ND		1.0	0.35	ug/L			08/24/18 23:56	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/24/18 23:56	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/24/18 23:56	1
Cyclohexane	ND		1.0	0.18	ug/L			08/24/18 23:56	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/24/18 23:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/24/18 23:56	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/24/18 23:56	1
Methyl acetate	ND		2.5	1.3	ug/L			08/24/18 23:56	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/24/18 23:56	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-10

Date Collected: 08/22/18 12:00

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	ND		1.0	0.16	ug/L			08/24/18 23:56	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/24/18 23:56	1
Styrene	ND		1.0	0.73	ug/L			08/24/18 23:56	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/24/18 23:56	1
Toluene	ND		1.0	0.51	ug/L			08/24/18 23:56	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/24/18 23:56	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/24/18 23:56	1
Trichloroethene	ND		1.0	0.46	ug/L			08/24/18 23:56	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/24/18 23:56	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/24/18 23:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/24/18 23:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		77 - 120		08/24/18 23:56	1
Toluene-d8 (Surr)	101		80 - 120		08/24/18 23:56	1
4-Bromofluorobenzene (Surr)	100		73 - 120		08/24/18 23:56	1
Dibromofluoromethane (Surr)	100		75 - 123		08/24/18 23:56	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L	-	08/25/18 08:02	09/01/18 08:19	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	28		15 - 110				08/25/18 08:02	09/01/18 08:19	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	5.2		1.6	0.28	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluoropentanoic acid (PFPeA)	4.0		1.6	0.39	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluorohexanoic acid (PFHxA)	3.5		1.6	0.46	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluoroheptanoic acid (PFHpA)	3.3		1.6	0.20	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluorooctanoic acid (PFOA)	9.3		1.6	0.68	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.21	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluorodecanoic acid (PFDA)	0.25 J		1.6	0.25	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.87	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.44	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.6	1.0	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluorotetradecanoic acid (PFTeA)	0.26 J		1.6	0.23	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluorobutanesulfonic acid (PFBS)	4.0		1.6	0.16	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluorohexanesulfonic acid (PFHxS)	4.0 B		1.6	0.14	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.15	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluorooctanesulfonic acid (PFOS)	5.8		1.6	0.43	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.25	ng/L		09/05/18 08:07	09/05/18 18:30	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.6	0.28	ng/L		09/05/18 08:07	09/05/18 18:30	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		16	2.5	ng/L		09/05/18 08:07	09/05/18 18:30	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		16	1.5	ng/L		09/05/18 08:07	09/05/18 18:30	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-10

Date Collected: 08/22/18 12:00

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-5

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
6:2 FTS	130		16	1.6	ng/L		09/05/18 08:07	09/05/18 18:30	1
8:2 FTS	ND		16	1.6	ng/L		09/05/18 08:07	09/05/18 18:30	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	58		25 - 150				09/05/18 08:07	09/05/18 18:30	1
13C5 PFPeA	67		25 - 150				09/05/18 08:07	09/05/18 18:30	1
13C2 PFHxA	71		25 - 150				09/05/18 08:07	09/05/18 18:30	1
13C4-PFHpA	71		25 - 150				09/05/18 08:07	09/05/18 18:30	1
13C4 PFOA	73		25 - 150				09/05/18 08:07	09/05/18 18:30	1
13C5 PFNA	69		25 - 150				09/05/18 08:07	09/05/18 18:30	1
13C2 PFDA	71		25 - 150				09/05/18 08:07	09/05/18 18:30	1
13C2 PFUnA	65		25 - 150				09/05/18 08:07	09/05/18 18:30	1
13C2 PFDoA	59		25 - 150				09/05/18 08:07	09/05/18 18:30	1
13C2-PFTeDA	56		25 - 150				09/05/18 08:07	09/05/18 18:30	1
13C3-PFBS	70		25 - 150				09/05/18 08:07	09/05/18 18:30	1
18O2 PFHxS	71		25 - 150				09/05/18 08:07	09/05/18 18:30	1
13C4 PFOS	70		25 - 150				09/05/18 08:07	09/05/18 18:30	1
13C8 FOSA	65		25 - 150				09/05/18 08:07	09/05/18 18:30	1
d3-NMeFOSAA	68		25 - 150				09/05/18 08:07	09/05/18 18:30	1
d5-NEtFOSAA	70		25 - 150				09/05/18 08:07	09/05/18 18:30	1
M2-6:2FTS	77		25 - 150				09/05/18 08:07	09/05/18 18:30	1
M2-8:2FTS	62		25 - 150				09/05/18 08:07	09/05/18 18:30	1

Client Sample ID: MW-4

Date Collected: 08/22/18 13:15

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/25/18 00:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/25/18 00:19	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/25/18 00:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/25/18 00:19	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/25/18 00:19	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/25/18 00:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/25/18 00:19	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/25/18 00:19	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/25/18 00:19	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/25/18 00:19	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/25/18 00:19	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/25/18 00:19	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/25/18 00:19	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/25/18 00:19	1
2-Hexanone	ND		5.0	1.2	ug/L			08/25/18 00:19	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/25/18 00:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/25/18 00:19	1
Acetone	ND		10	3.0	ug/L			08/25/18 00:19	1
Benzene	ND		1.0	0.41	ug/L			08/25/18 00:19	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/25/18 00:19	1
Bromoform	ND		1.0	0.26	ug/L			08/25/18 00:19	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-4

Date Collected: 08/22/18 13:15

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.69	ug/L			08/25/18 00:19	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/25/18 00:19	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/25/18 00:19	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/25/18 00:19	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/25/18 00:19	1
Chloroethane	ND		1.0	0.32	ug/L			08/25/18 00:19	1
Chloroform	ND		1.0	0.34	ug/L			08/25/18 00:19	1
Chloromethane	ND		1.0	0.35	ug/L			08/25/18 00:19	1
cis-1,2-Dichloroethene	15		1.0	0.81	ug/L			08/25/18 00:19	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/25/18 00:19	1
Cyclohexane	ND		1.0	0.18	ug/L			08/25/18 00:19	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/25/18 00:19	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/25/18 00:19	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/25/18 00:19	1
Methyl acetate	ND		2.5	1.3	ug/L			08/25/18 00:19	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/25/18 00:19	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/25/18 00:19	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/25/18 00:19	1
Styrene	ND		1.0	0.73	ug/L			08/25/18 00:19	1
Tetrachloroethene	20		1.0	0.36	ug/L			08/25/18 00:19	1
Toluene	ND		1.0	0.51	ug/L			08/25/18 00:19	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/25/18 00:19	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/25/18 00:19	1
Trichloroethene	5.0		1.0	0.46	ug/L			08/25/18 00:19	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/25/18 00:19	1
Vinyl chloride	4.0		1.0	0.90	ug/L			08/25/18 00:19	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/25/18 00:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		77 - 120		08/25/18 00:19	1
Toluene-d8 (Surr)	101		80 - 120		08/25/18 00:19	1
4-Bromofluorobenzene (Surr)	99		73 - 120		08/25/18 00:19	1
Dibromofluoromethane (Surr)	98		75 - 123		08/25/18 00:19	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		08/25/18 08:02	09/01/18 08:42	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	20		15 - 110				08/25/18 08:02	09/01/18 08:42	1

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	11		1.6	0.28	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluoropentanoic acid (PFPeA)	7.6		1.6	0.39	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluorohexanoic acid (PFHxA)	6.3		1.6	0.46	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluoroheptanoic acid (PFHpA)	4.7		1.6	0.20	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluorooctanoic acid (PFOA)	10		1.6	0.68	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluorononanoic acid (PFNA)	1.2 J		1.6	0.22	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluorodecanoic acid (PFDA)	0.36 J		1.6	0.25	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.88	ng/L		09/05/18 08:07	09/05/18 18:45	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-4

Date Collected: 08/22/18 13:15

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-6

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.44	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.6	1.0	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.23	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluorobutanesulfonic acid (PFBS)	8.2		1.6	0.16	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluorohexanesulfonic acid (PFHxS)	4.5	B	1.6	0.14	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluoroheptanesulfonic Acid (PFHpS)	0.56	J	1.6	0.15	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluorooctanesulfonic acid (PFOS)	24		1.6	0.43	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.26	ng/L		09/05/18 08:07	09/05/18 18:45	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.6	0.28	ng/L		09/05/18 08:07	09/05/18 18:45	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		16	2.5	ng/L		09/05/18 08:07	09/05/18 18:45	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		16	1.5	ng/L		09/05/18 08:07	09/05/18 18:45	1
8:2 FTS	ND		16	1.6	ng/L		09/05/18 08:07	09/05/18 18:45	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	59		25 - 150	09/05/18 08:07	09/05/18 18:45	1
13C5 PFPeA	72		25 - 150	09/05/18 08:07	09/05/18 18:45	1
13C2 PFHxA	79		25 - 150	09/05/18 08:07	09/05/18 18:45	1
13C4-PFHpA	80		25 - 150	09/05/18 08:07	09/05/18 18:45	1
13C4 PFOA	78		25 - 150	09/05/18 08:07	09/05/18 18:45	1
13C5 PFNA	80		25 - 150	09/05/18 08:07	09/05/18 18:45	1
13C2 PFDA	79		25 - 150	09/05/18 08:07	09/05/18 18:45	1
13C2 PFUnA	72		25 - 150	09/05/18 08:07	09/05/18 18:45	1
13C2 PFDoA	68		25 - 150	09/05/18 08:07	09/05/18 18:45	1
13C2-PFTeDA	72		25 - 150	09/05/18 08:07	09/05/18 18:45	1
13C3-PFBS	72		25 - 150	09/05/18 08:07	09/05/18 18:45	1
18O2 PFHxS	77		25 - 150	09/05/18 08:07	09/05/18 18:45	1
13C4 PFOS	77		25 - 150	09/05/18 08:07	09/05/18 18:45	1
13C8 FOSA	71		25 - 150	09/05/18 08:07	09/05/18 18:45	1
d3-NMeFOSAA	74		25 - 150	09/05/18 08:07	09/05/18 18:45	1
d5-NEtFOSAA	78		25 - 150	09/05/18 08:07	09/05/18 18:45	1
M2-8:2FTS	72		25 - 150	09/05/18 08:07	09/05/18 18:45	1

Method: 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
6:2 FTS	300		160	16	ng/L		09/05/18 08:07	09/06/18 21:23	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
M2-6:2FTS	96		25 - 150				09/05/18 08:07	09/06/18 21:23	10

Client Sample ID: EQUIPMENT BLANK

Date Collected: 08/22/18 13:35

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-7

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.72	J	1.6	0.29	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.40	ng/L		09/05/18 08:07	09/06/18 21:31	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 480-140808-7

Date Collected: 08/22/18 13:35

Matrix: Water

Date Received: 08/24/18 01:00

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.48	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.21	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluorooctanoic acid (PFOA)	ND		1.6	0.70	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.22	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.26	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.91	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.45	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.6	1.1	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.24	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.16	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluorohexanesulfonic acid (PFHxS)	0.30	J B	1.6	0.14	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.16	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.44	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.26	ng/L		09/05/18 08:07	09/06/18 21:31	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.6	0.29	ng/L		09/05/18 08:07	09/06/18 21:31	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		16	2.6	ng/L		09/05/18 08:07	09/06/18 21:31	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		16	1.6	ng/L		09/05/18 08:07	09/06/18 21:31	1
6:2 FTS	ND		16	1.6	ng/L		09/05/18 08:07	09/06/18 21:31	1
8:2 FTS	ND		16	1.6	ng/L		09/05/18 08:07	09/06/18 21:31	1

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	108		25 - 150	09/05/18 08:07	09/06/18 21:31	1
13C5 PFPeA	113		25 - 150	09/05/18 08:07	09/06/18 21:31	1
13C2 PFHxA	109		25 - 150	09/05/18 08:07	09/06/18 21:31	1
13C4-PFHpA	102		25 - 150	09/05/18 08:07	09/06/18 21:31	1
13C4 PFOA	101		25 - 150	09/05/18 08:07	09/06/18 21:31	1
13C5 PFNA	104		25 - 150	09/05/18 08:07	09/06/18 21:31	1
13C2 PFDA	101		25 - 150	09/05/18 08:07	09/06/18 21:31	1
13C2 PFUnA	103		25 - 150	09/05/18 08:07	09/06/18 21:31	1
13C2 PFDoA	96		25 - 150	09/05/18 08:07	09/06/18 21:31	1
13C2-PFTeDA	83		25 - 150	09/05/18 08:07	09/06/18 21:31	1
13C3-PFBS	108		25 - 150	09/05/18 08:07	09/06/18 21:31	1
18O2 PFHxS	88		25 - 150	09/05/18 08:07	09/06/18 21:31	1
13C4 PFOS	100		25 - 150	09/05/18 08:07	09/06/18 21:31	1
13C8 FOSA	98		25 - 150	09/05/18 08:07	09/06/18 21:31	1
d3-NMeFOSAA	106		25 - 150	09/05/18 08:07	09/06/18 21:31	1
d5-NEtFOSAA	105		25 - 150	09/05/18 08:07	09/06/18 21:31	1
M2-6:2FTS	122		25 - 150	09/05/18 08:07	09/06/18 21:31	1
M2-8:2FTS	114		25 - 150	09/05/18 08:07	09/06/18 21:31	1

Client Sample ID: MW-7

Lab Sample ID: 480-140808-8

Date Collected: 08/22/18 13:55

Matrix: Water

Date Received: 08/24/18 01:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/25/18 00:43	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-7

Date Collected: 08/22/18 13:55

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/25/18 00:43	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/25/18 00:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/25/18 00:43	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/25/18 00:43	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/25/18 00:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/25/18 00:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/25/18 00:43	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/25/18 00:43	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/25/18 00:43	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/25/18 00:43	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/25/18 00:43	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/25/18 00:43	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/25/18 00:43	1
2-Hexanone	ND		5.0	1.2	ug/L			08/25/18 00:43	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/25/18 00:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/25/18 00:43	1
Acetone	3.7	J	10	3.0	ug/L			08/25/18 00:43	1
Benzene	ND		1.0	0.41	ug/L			08/25/18 00:43	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/25/18 00:43	1
Bromoform	ND		1.0	0.26	ug/L			08/25/18 00:43	1
Bromomethane	ND		1.0	0.69	ug/L			08/25/18 00:43	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/25/18 00:43	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/25/18 00:43	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/25/18 00:43	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/25/18 00:43	1
Chloroethane	ND		1.0	0.32	ug/L			08/25/18 00:43	1
Chloroform	ND		1.0	0.34	ug/L			08/25/18 00:43	1
Chloromethane	ND		1.0	0.35	ug/L			08/25/18 00:43	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/25/18 00:43	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/25/18 00:43	1
Cyclohexane	ND		1.0	0.18	ug/L			08/25/18 00:43	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/25/18 00:43	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/25/18 00:43	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/25/18 00:43	1
Methyl acetate	ND		2.5	1.3	ug/L			08/25/18 00:43	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/25/18 00:43	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/25/18 00:43	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/25/18 00:43	1
Styrene	ND		1.0	0.73	ug/L			08/25/18 00:43	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/25/18 00:43	1
Toluene	ND		1.0	0.51	ug/L			08/25/18 00:43	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/25/18 00:43	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/25/18 00:43	1
Trichloroethene	ND		1.0	0.46	ug/L			08/25/18 00:43	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/25/18 00:43	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/25/18 00:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/25/18 00:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		08/25/18 00:43	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-7

Date Collected: 08/22/18 13:55

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	101		80 - 120		08/25/18 00:43	1
4-Bromofluorobenzene (Surr)	101		73 - 120		08/25/18 00:43	1
Dibromofluoromethane (Surr)	101		75 - 123		08/25/18 00:43	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		2.0	1.0	ug/L	-	08/25/18 08:02	09/01/18 09:05	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	16		15 - 110				08/25/18 08:02	09/01/18 09:05	10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	11		1.7	0.30	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluoropentanoic acid (PFPeA)	9.4		1.7	0.42	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluorohexanoic acid (PFHxA)	9.1		1.7	0.49	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluoroheptanoic acid (PFHpA)	6.8		1.7	0.21	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluorooctanoic acid (PFOA)	17		1.7	0.72	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluorononanoic acid (PFNA)	3.7		1.7	0.23	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluorodecanoic acid (PFDA)	2.6		1.7	0.26	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.94	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluorododecanoic acid (PFDoA)	1.5 J		1.7	0.47	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.7	1.1	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluorotetradecanoic acid (PFTeA)	1.4 J		1.7	0.25	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluorobutanesulfonic acid (PFBS)	33		1.7	0.17	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluorohexanesulfonic acid (PFHxS)	4.6 B		1.7	0.14	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluoroheptanesulfonic Acid (PFHpS)	1.1 J		1.7	0.16	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluorooctanesulfonic acid (PFOS)	52		1.7	0.46	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.27	ng/L		09/05/18 08:07	09/05/18 19:00	1
Perfluorooctane Sulfonamide (FOSA)	0.36 J		1.7	0.30	ng/L		09/05/18 08:07	09/05/18 19:00	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		17	2.6	ng/L		09/05/18 08:07	09/05/18 19:00	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		17	1.6	ng/L		09/05/18 08:07	09/05/18 19:00	1
8:2 FTS	2.0 J		17	1.7	ng/L		09/05/18 08:07	09/05/18 19:00	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	47		25 - 150				09/05/18 08:07	09/05/18 19:00	1
13C5 PFPeA	58		25 - 150				09/05/18 08:07	09/05/18 19:00	1
13C2 PFHxA	67		25 - 150				09/05/18 08:07	09/05/18 19:00	1
13C4-PFHpA	71		25 - 150				09/05/18 08:07	09/05/18 19:00	1
13C4 PFOA	68		25 - 150				09/05/18 08:07	09/05/18 19:00	1
13C5 PFNA	71		25 - 150				09/05/18 08:07	09/05/18 19:00	1
13C2 PFDA	70		25 - 150				09/05/18 08:07	09/05/18 19:00	1
13C2 PFUnA	63		25 - 150				09/05/18 08:07	09/05/18 19:00	1
13C2 PFDoA	51		25 - 150				09/05/18 08:07	09/05/18 19:00	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-7

Date Collected: 08/22/18 13:55

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-8

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C2-PFTeDA	36		25 - 150	09/05/18 08:07	09/05/18 19:00	1
13C3-PFBS	64		25 - 150	09/05/18 08:07	09/05/18 19:00	1
18O2 PFHxS	69		25 - 150	09/05/18 08:07	09/05/18 19:00	1
13C4 PFOS	69		25 - 150	09/05/18 08:07	09/05/18 19:00	1
13C8 FOSA	58		25 - 150	09/05/18 08:07	09/05/18 19:00	1
d3-NMeFOSAA	64		25 - 150	09/05/18 08:07	09/05/18 19:00	1
d5-NEtFOSAA	70		25 - 150	09/05/18 08:07	09/05/18 19:00	1
M2-8:2FTS	79		25 - 150	09/05/18 08:07	09/05/18 19:00	1

Method: 537 (modified) - Fluorinated Alkyl Substances - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
6:2 FTS	1300		170	17	ng/L	-	09/05/18 08:07	09/06/18 21:38	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
M2-6:2FTS	90		25 - 150				09/05/18 08:07	09/06/18 21:38	10

Client Sample ID: FIELD BLANK

Date Collected: 08/22/18 14:00

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-9

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	0.50	J	1.6	0.27	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluoropentanoic acid (PFPeA)	ND		1.6	0.38	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluorohexanoic acid (PFHxA)	ND		1.6	0.45	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluoroheptanoic acid (PFHpA)	ND		1.6	0.20	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluorooctanoic acid (PFOA)	ND		1.6	0.67	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.21	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.24	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.86	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.43	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.6	1.0	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.6	0.23	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.6	0.16	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluorohexanesulfonic acid (PFHxS)	0.26	J B	1.6	0.13	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.15	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.6	0.42	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.25	ng/L		09/05/18 08:07	09/06/18 21:46	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.6	0.27	ng/L		09/05/18 08:07	09/06/18 21:46	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		16	2.4	ng/L		09/05/18 08:07	09/06/18 21:46	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		16	1.5	ng/L		09/05/18 08:07	09/06/18 21:46	1
6:2 FTS	1.7	J	16	1.6	ng/L		09/05/18 08:07	09/06/18 21:46	1
8:2 FTS	ND		16	1.6	ng/L		09/05/18 08:07	09/06/18 21:46	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	108		25 - 150				09/05/18 08:07	09/06/18 21:46	1
13C5 PFPeA	112		25 - 150				09/05/18 08:07	09/06/18 21:46	1
13C2 PFHxA	114		25 - 150				09/05/18 08:07	09/06/18 21:46	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: FIELD BLANK

Date Collected: 08/22/18 14:00

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-9

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4-PFHpA	103		25 - 150	09/05/18 08:07	09/06/18 21:46	1
13C4 PFOA	101		25 - 150	09/05/18 08:07	09/06/18 21:46	1
13C5 PFNA	101		25 - 150	09/05/18 08:07	09/06/18 21:46	1
13C2 PFDA	98		25 - 150	09/05/18 08:07	09/06/18 21:46	1
13C2 PFUnA	99		25 - 150	09/05/18 08:07	09/06/18 21:46	1
13C2 PFDoA	89		25 - 150	09/05/18 08:07	09/06/18 21:46	1
13C2-PFTeDA	68		25 - 150	09/05/18 08:07	09/06/18 21:46	1
13C3-PFBS	105		25 - 150	09/05/18 08:07	09/06/18 21:46	1
18O2 PFHxS	87		25 - 150	09/05/18 08:07	09/06/18 21:46	1
13C4 PFOS	95		25 - 150	09/05/18 08:07	09/06/18 21:46	1
13C8 FOSA	95		25 - 150	09/05/18 08:07	09/06/18 21:46	1
d3-NMeFOSAA	101		25 - 150	09/05/18 08:07	09/06/18 21:46	1
d5-NEtFOSAA	103		25 - 150	09/05/18 08:07	09/06/18 21:46	1
M2-6:2FTS	127		25 - 150	09/05/18 08:07	09/06/18 21:46	1
M2-8:2FTS	115		25 - 150	09/05/18 08:07	09/06/18 21:46	1

Client Sample ID: MW-6

Date Collected: 08/22/18 15:10

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/25/18 01:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/25/18 01:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/25/18 01:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/25/18 01:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/25/18 01:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/25/18 01:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/25/18 01:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/25/18 01:06	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/25/18 01:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/25/18 01:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/25/18 01:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/25/18 01:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/25/18 01:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/25/18 01:06	1
2-Hexanone	ND		5.0	1.2	ug/L			08/25/18 01:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/25/18 01:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/25/18 01:06	1
Acetone	ND		10	3.0	ug/L			08/25/18 01:06	1
Benzene	ND		1.0	0.41	ug/L			08/25/18 01:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/25/18 01:06	1
Bromoform	ND		1.0	0.26	ug/L			08/25/18 01:06	1
Bromomethane	ND		1.0	0.69	ug/L			08/25/18 01:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/25/18 01:06	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/25/18 01:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/25/18 01:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/25/18 01:06	1
Chloroethane	ND		1.0	0.32	ug/L			08/25/18 01:06	1
Chloroform	ND		1.0	0.34	ug/L			08/25/18 01:06	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-6

Date Collected: 08/22/18 15:10

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-10

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		1.0	0.35	ug/L			08/25/18 01:06	1
cis-1,2-Dichloroethene	22		1.0	0.81	ug/L			08/25/18 01:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/25/18 01:06	1
Cyclohexane	ND		1.0	0.18	ug/L			08/25/18 01:06	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/25/18 01:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/25/18 01:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/25/18 01:06	1
Methyl acetate	ND		2.5	1.3	ug/L			08/25/18 01:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/25/18 01:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/25/18 01:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/25/18 01:06	1
Styrene	ND		1.0	0.73	ug/L			08/25/18 01:06	1
Tetrachloroethene	0.42	J	1.0	0.36	ug/L			08/25/18 01:06	1
Toluene	ND		1.0	0.51	ug/L			08/25/18 01:06	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/25/18 01:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/25/18 01:06	1
Trichloroethene	ND		1.0	0.46	ug/L			08/25/18 01:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/25/18 01:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/25/18 01:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/25/18 01:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		77 - 120		08/25/18 01:06	1
Toluene-d8 (Surr)	100		80 - 120		08/25/18 01:06	1
4-Bromofluorobenzene (Surr)	99		73 - 120		08/25/18 01:06	1
Dibromofluoromethane (Surr)	105		75 - 123		08/25/18 01:06	1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		2.0	1.0	ug/L	-	08/25/18 08:02	09/01/18 09:29	10
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	17		15 - 110				08/25/18 08:02	09/01/18 09:29	10

Method: 537 (modified) - Fluorinated Alkyl Substances

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	1.2	J	1.6	0.28	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluoropentanoic acid (PFPeA)	0.98	J	1.6	0.39	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluorohexanoic acid (PFHxA)	0.95	J	1.6	0.46	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluoroheptanoic acid (PFHpA)	0.59	J	1.6	0.20	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluorooctanoic acid (PFOA)	1.5	J	1.6	0.68	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluorononanoic acid (PFNA)	ND		1.6	0.21	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluorodecanoic acid (PFDA)	ND		1.6	0.25	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluoroundecanoic acid (PFUnA)	ND		1.6	0.87	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluorododecanoic acid (PFDoA)	ND		1.6	0.44	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluorotridecanoic Acid (PFTriA)	ND		1.6	1.0	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluorotetradecanoic acid (PFTeA)	0.29	J	1.6	0.23	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluorobutanesulfonic acid (PFBS)	1.2	J	1.6	0.16	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluorohexanesulfonic acid (PFHxS)	0.76	J B	1.6	0.14	ng/L		09/05/18 08:07	09/05/18 19:15	1

TestAmerica Buffalo

Client Sample Results

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-6

Date Collected: 08/22/18 15:10

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-10

Matrix: Water

Method: 537 (modified) - Fluorinated Alkyl Substances (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic Acid (PFHpS)	ND		1.6	0.15	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluorooctanesulfonic acid (PFOS)	1.3	J	1.6	0.43	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.6	0.25	ng/L		09/05/18 08:07	09/05/18 19:15	1
Perfluorooctane Sulfonamide (FOSA)	ND		1.6	0.28	ng/L		09/05/18 08:07	09/05/18 19:15	1
N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	ND		16	2.5	ng/L		09/05/18 08:07	09/05/18 19:15	1
N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	ND		16	1.5	ng/L		09/05/18 08:07	09/05/18 19:15	1
6:2 FTS	9.2	J	16	1.6	ng/L		09/05/18 08:07	09/05/18 19:15	1
8:2 FTS	ND		16	1.6	ng/L		09/05/18 08:07	09/05/18 19:15	1
Isotope Dilution	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
13C4 PFBA	73		25 - 150				09/05/18 08:07	09/05/18 19:15	1
13C5 PFPeA	95		25 - 150				09/05/18 08:07	09/05/18 19:15	1
13C2 PFHxA	95		25 - 150				09/05/18 08:07	09/05/18 19:15	1
13C4-PFHpA	98		25 - 150				09/05/18 08:07	09/05/18 19:15	1
13C4 PFOA	90		25 - 150				09/05/18 08:07	09/05/18 19:15	1
13C5 PFNA	95		25 - 150				09/05/18 08:07	09/05/18 19:15	1
13C2 PFDA	96		25 - 150				09/05/18 08:07	09/05/18 19:15	1
13C2 PFUnA	95		25 - 150				09/05/18 08:07	09/05/18 19:15	1
13C2 PFDoA	87		25 - 150				09/05/18 08:07	09/05/18 19:15	1
13C2-PFTeDA	79		25 - 150				09/05/18 08:07	09/05/18 19:15	1
13C3-PFBS	93		25 - 150				09/05/18 08:07	09/05/18 19:15	1
18O2 PFHxS	97		25 - 150				09/05/18 08:07	09/05/18 19:15	1
13C4 PFOS	97		25 - 150				09/05/18 08:07	09/05/18 19:15	1
13C8 FOSA	94		25 - 150				09/05/18 08:07	09/05/18 19:15	1
d3-NMeFOSAA	93		25 - 150				09/05/18 08:07	09/05/18 19:15	1
d5-NEtFOSAA	95		25 - 150				09/05/18 08:07	09/05/18 19:15	1
M2-6:2FTS	91		25 - 150				09/05/18 08:07	09/05/18 19:15	1
M2-8:2FTS	86		25 - 150				09/05/18 08:07	09/05/18 19:15	1

TestAmerica Buffalo

Lab Chronicle

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-3

Date Collected: 08/22/18 09:40

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	431413	08/24/18 22:23	AMM	TAL BUF
Total/NA	Prep	3510C			431438	08/25/18 08:02	JRD	TAL BUF
Total/NA	Analysis	8270D SIM ID		5	432509	09/01/18 07:09	DMR	TAL BUF
Total/NA	Prep	3535			243859	09/05/18 08:07	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	244021	09/05/18 17:45	S1M	TAL SAC

Client Sample ID: MW-1R

Date Collected: 08/22/18 10:35

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	431413	08/24/18 22:46	AMM	TAL BUF
Total/NA	Prep	3510C			431438	08/25/18 08:02	JRD	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	432509	09/01/18 06:23	DMR	TAL BUF
Total/NA	Prep	3535			243859	09/05/18 08:07	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	244021	09/05/18 17:52	S1M	TAL SAC

Client Sample ID: MW-2R

Date Collected: 08/22/18 11:10

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	431413	08/24/18 23:10	AMM	TAL BUF
Total/NA	Prep	3510C			431438	08/25/18 08:02	JRD	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	432509	09/01/18 07:32	DMR	TAL BUF
Total/NA	Prep	3535			243859	09/05/18 08:07	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	244021	09/05/18 18:15	S1M	TAL SAC

Client Sample ID: DUPLICATE

Date Collected: 08/22/18 11:20

Date Received: 08/24/18 01:00

Lab Sample ID: 480-140808-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	431413	08/24/18 23:33	AMM	TAL BUF
Total/NA	Prep	3510C			431438	08/25/18 08:02	JRD	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	432509	09/01/18 07:56	DMR	TAL BUF
Total/NA	Prep	3535			243859	09/05/18 08:07	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	244021	09/05/18 18:22	S1M	TAL SAC

TestAmerica Buffalo

Lab Chronicle

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: MW-10

Lab Sample ID: 480-140808-5

Date Collected: 08/22/18 12:00

Matrix: Water

Date Received: 08/24/18 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	431413	08/24/18 23:56	AMM	TAL BUF
Total/NA	Prep	3510C			431438	08/25/18 08:02	JRD	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	432509	09/01/18 08:19	DMR	TAL BUF
Total/NA	Prep	3535			243859	09/05/18 08:07	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	244021	09/05/18 18:30	S1M	TAL SAC

Client Sample ID: MW-4

Lab Sample ID: 480-140808-6

Date Collected: 08/22/18 13:15

Matrix: Water

Date Received: 08/24/18 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	431413	08/25/18 00:19	AMM	TAL BUF
Total/NA	Prep	3510C			431438	08/25/18 08:02	JRD	TAL BUF
Total/NA	Analysis	8270D SIM ID		1	432509	09/01/18 08:42	DMR	TAL BUF
Total/NA	Prep	3535	DL		243859	09/05/18 08:07	TWL	TAL SAC
Total/NA	Analysis	537 (modified)	DL	10	244278	09/06/18 21:23	S1M	TAL SAC
Total/NA	Prep	3535			243859	09/05/18 08:07	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	244021	09/05/18 18:45	S1M	TAL SAC

Client Sample ID: EQUIPMENT BLANK

Lab Sample ID: 480-140808-7

Date Collected: 08/22/18 13:35

Matrix: Water

Date Received: 08/24/18 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			243859	09/05/18 08:07	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	244278	09/06/18 21:31	S1M	TAL SAC

Client Sample ID: MW-7

Lab Sample ID: 480-140808-8

Date Collected: 08/22/18 13:55

Matrix: Water

Date Received: 08/24/18 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	431413	08/25/18 00:43	AMM	TAL BUF
Total/NA	Prep	3510C			431438	08/25/18 08:02	JRD	TAL BUF
Total/NA	Analysis	8270D SIM ID		10	432509	09/01/18 09:05	DMR	TAL BUF
Total/NA	Prep	3535	DL		243859	09/05/18 08:07	TWL	TAL SAC
Total/NA	Analysis	537 (modified)	DL	10	244278	09/06/18 21:38	S1M	TAL SAC
Total/NA	Prep	3535			243859	09/05/18 08:07	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	244021	09/05/18 19:00	S1M	TAL SAC

TestAmerica Buffalo

Lab Chronicle

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Client Sample ID: FIELD BLANK

Lab Sample ID: 480-140808-9

Date Collected: 08/22/18 14:00

Matrix: Water

Date Received: 08/24/18 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535			243859	09/05/18 08:07	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	244278	09/06/18 21:46	S1M	TAL SAC

Client Sample ID: MW-6

Lab Sample ID: 480-140808-10

Date Collected: 08/22/18 15:10

Matrix: Water

Date Received: 08/24/18 01:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	431413	08/25/18 01:06	AMM	TAL BUF
Total/NA	Prep	3510C			431438	08/25/18 08:02	JRD	TAL BUF
Total/NA	Analysis	8270D SIM ID		10	432509	09/01/18 09:29	DMR	TAL BUF
Total/NA	Prep	3535			243859	09/05/18 08:07	TWL	TAL SAC
Total/NA	Analysis	537 (modified)		1	244021	09/05/18 19:15	S1M	TAL SAC

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

Laboratory: TestAmerica Sacramento

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	11666	03-31-19

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
537 (modified)	3535	Water	6:2 FTS
537 (modified)	3535	Water	8:2 FTS
537 (modified)	3535	Water	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)
537 (modified)	3535	Water	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)
537 (modified)	3535	Water	Perfluorobutanesulfonic acid (PFBS)
537 (modified)	3535	Water	Perfluorobutanoic acid (PFBA)
537 (modified)	3535	Water	Perfluorodecanesulfonic acid (PFDS)
537 (modified)	3535	Water	Perfluorodecanoic acid (PFDA)
537 (modified)	3535	Water	Perfluorododecanoic acid (PFDoA)
537 (modified)	3535	Water	Perfluoroheptanesulfonic Acid (PFHpS)
537 (modified)	3535	Water	Perfluoroheptanoic acid (PFHpA)
537 (modified)	3535	Water	Perfluorohexanesulfonic acid (PFHxS)
537 (modified)	3535	Water	Perfluorohexanoic acid (PFHxA)
537 (modified)	3535	Water	Perfluorononanoic acid (PFNA)
537 (modified)	3535	Water	Perfluorooctane Sulfonamide (FOSA)
537 (modified)	3535	Water	Perfluorooctanesulfonic acid (PFOS)
537 (modified)	3535	Water	Perfluorooctanoic acid (PFOA)
537 (modified)	3535	Water	Perfluoropentanoic acid (PFPeA)
537 (modified)	3535	Water	Perfluorotetradecanoic acid (PFTeA)
537 (modified)	3535	Water	Perfluorotridecanoic Acid (PFTriA)
537 (modified)	3535	Water	Perfluoroundecanoic acid (PFUnA)

Method Summary

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	TAL BUF
537 (modified)	Fluorinated Alkyl Substances	EPA	TAL SAC
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
3535	Solid-Phase Extraction (SPE)	SW846	TAL SAC
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Sample Summary

Client: Precision Environmental Services Inc.
Project/Site: DEC Dambrose Cleaners #447030

TestAmerica Job ID: 480-140808-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-140808-1	MW-3	Water	08/22/18 09:40	08/24/18 01:00
480-140808-2	MW-1R	Water	08/22/18 10:35	08/24/18 01:00
480-140808-3	MW-2R	Water	08/22/18 11:10	08/24/18 01:00
480-140808-4	DUPLICATE	Water	08/22/18 11:20	08/24/18 01:00
480-140808-5	MW-10	Water	08/22/18 12:00	08/24/18 01:00
480-140808-6	MW-4	Water	08/22/18 13:15	08/24/18 01:00
480-140808-7	EQUIPMENT BLANK	Water	08/22/18 13:35	08/24/18 01:00
480-140808-8	MW-7	Water	08/22/18 13:55	08/24/18 01:00
480-140808-9	FIELD BLANK	Water	08/22/18 14:00	08/24/18 01:00
480-140808-10	MW-6	Water	08/22/18 15:10	08/24/18 01:00

Client Information Company: Precision Environmental Services Inc. Address: 831 State Route 67 Ste 38 City: Ballston Spa State: NY Zip: 12020 Phone: 518-885-4399 (Tel) Email: spheips@pesnyinc.com Project Name: DEC Dambrose Cleaners #447030 Site: 1517 VAN VRAHLEN AVE, SCHENECTADY		Sampler: JUDITHAN ROZMAN Lab PM: Stone, Judy L Phone: 518-888-6254 E-Mail: judy.stone@testamericainc.com		COC No: 480-116609-26943.1 Page: Page 1 of 1 Job #:	
Analysis Request: 480-140808 COC					
Due Date Requested: TAT Requested (days): PO #: Spill #447030 WO #:		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:			
Matrix (W-Water, S-Solid, O-Water/Oil, BT-Tissue, A-Air) Sample Type (C=Comp, G=Grab) Sample Time Sample Date		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) PFC_IDA - PFA's, Standard List (21 Analytes) 8260C - TCL list VOAs 8270D - SIM MS_ID - 1,4-Dioxane			
Sample Identification MW-3 MW-1R MW-2R DUBLE CARE MW-10 MW-4 EQUADMEPT BLANK MW-7 FIELD BLANK MW-6		Total Number of Containers Special Instructions/Note: * Q407E #48018288* * ONLY XL L22ER FOR MW-6, RAD RY *			
Possible Hazard Identification ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Empty Kit Relinquished by: JUDITHAN ROZMAN (To FRODOE) Relinquished by: Karl Lachner Relinquished by:					
Date/Time: 8/22/18 17:30 Date/Time: 8-23-18 1800 Date/Time:		Date/Time: 8-23-18 0715 Date/Time: 8-24-18 0100 Date/Time:			
Company: PES Company: TA Company:		Company: TA Company:			
Custody Seal No.: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 0.7, 1.0 #1			

Chain of Custody Record

Client Information Company: Precision Environmental Services Inc Address: 831 State Route 67 Ste 38 City: Ballston Spa State, Zip: NY, 12020 Phone: 518-885-4399(Tel) Email: spheps@pesnyinc.com Project Name: DEC Dambrose Cleaners #447030 Site: 1517 LAW VANDERBILT AVE, SCHEMENETZKY		Sampler: Lab PM: Stone, Judy L Phone: E-Mail: judy.stone@testamericainc.com 518-885-6254		Carrier Tracking No(e): COC No: 480-116809-28943.1 Page: Page 1 of 1 Job #:																																																																																																																																																
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Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months Special Instructions/QC Requirements: PLEASE CC judy.stone@pesnyinc.com ALLO																																																																																																																																																				
Time: Date/Time: 8/22/18 17:30 Date/Time: 8/24/18 930 Date/Time:																																																																																																																																																				
Custody Seal No.: 512382 Custody Seal Intact: ☒ Yes ☐ No Cooler Temperature(s) °C and Other Remarks: 0.8																																																																																																																																																				

No Time Listed on PFC 290ml container. DT 8/25/18

Login Sample Receipt Checklist

Client: Precision Environmental Services Inc.

Job Number: 480-140808-1

Login Number: 140808

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	False	no vials for MS/MSD for VOA
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	PES
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Precision Environmental Services Inc.

Job Number: 480-140808-1

Login Number: 140808

List Number: 2

Creator: Her, David A

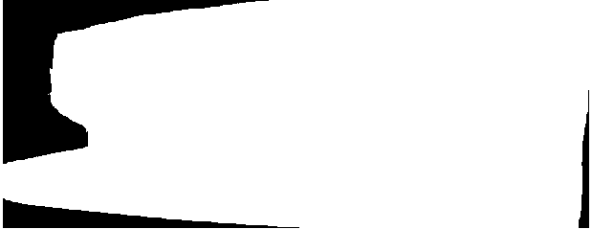
List Source: TestAmerica Sacramento

List Creation: 08/25/18 04:23 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	512382
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.8c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

APPENDIX B

QEP CERTIFICATION





Enclosure 1
Engineering Controls - Standby Consultant/Contractor Certification Form



Site Details		Box 1
Site No.	447030	
Site Name Dambrose Cleaners		
Site Address: 1517 VanVranken Avenue Zip Code: 12308		
City/Town: Schenectady		
County: Schenectady		
Site Acreage: 0.1		
Reporting Period: June 30, 2016 to June 30, 2019		
	YES	NO
1. Is the information above correct?	☒	☐
If NO, include handwritten above or on a separate sheet.		
2. To your knowledge has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	☒
3. To your knowledge has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☒
4. To your knowledge have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☒
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. To your knowledge is the site currently undergoing development?	☐	☒

		Box 2
	YES	NO
6. Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	☒	☐
7. Are all ICs/ECs in place and functioning as designed?	☒	☐
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and contact the DEC PM regarding the development of a Corrective Measures Work Plan to address these issues.		
 _____ Signature of Standby Consultant/Contractor		<u>9/5/19</u> _____ Date

SITE NO. 447030

Box 3

Description of Institutional Controls

Parcel
39.58-1-9

Owner
Natasha Polishchuk

Institutional Control

Ground Water Use Restriction
Landuse Restriction

Soil Management Plan
Monitoring Plan
Site Management Plan
O&M Plan
IC/EC Plan

From ROD:

Imposition of an institutional control in the form of an environmental easement that will require (a) limiting the use and development of the property to residential use, which would also permit commercial or industrial uses; (b) compliance with the approved site management plan; (c) restricting the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by NYSDOH; and (d) periodic certification of institutional and engineering controls.

Development of a site management plan which will include the following institutional and engineering controls: (a) continued evaluation of the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified;

(b) continued operation of the sub-slab depressurization system at the Dambrose building whenever it is occupied; (c) monitoring of groundwater and soil vapor; (d) identification of any use restrictions on the site; and (e) provisions for the continued proper operation and maintenance of the components of the remedy.

The Department will periodically certify the institutional and engineering controls until the Department determines that this certification is no longer needed. This submittal will: (a) contain certification that the institutional controls and engineering controls put in place are still in place and are either unchanged from the previous certification or are compliant with Department-approved modifications; and (b) state that nothing has occurred that would impair the ability of the control to protect public health or the environment, or constitute a violation or failure to comply with the site management plan unless otherwise approved by the Department.

Box 4

Description of Engineering Controls

Parcel
39.58-1-9

Engineering Control

Air Sparging/Soil Vapor Extraction
Vapor Mitigation

Sub-slab Depressurization System for 1517 Van Vranken Ave. and Soil Vapor Extraction system for horizontal wells on site and adjacent property.

Periodic Review Report (PRR) Certification Statements

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

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification, including data and material prepared by previous contractors for the current certifying period, if any;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

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

- (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) nothing has occurred that would constitute a failure to comply with the Site Management Plan, or equivalent if no Site Management Plan exists.

YES NO

☒ ☐

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



Signature of Standby Consultant/Contractor



Date

IC/EC CERTIFICATIONS

Qualified Environmental Professional Signature

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

I William Hennessy at PRECISION ENVIRONMENTAL
print name

831 Route 67, # 38A
Balletta Spa, NY 12020
(print business address)

am certifying as a Qualified Environmental Professional.

William Hennessy Jr.
Signature of Qualified Environmental Professional

Stamp
(Required for PE)

Date

9/5/29