#### PERIODIC REVIEW REPORT

#### PRR period of January 16, 2018 to January 16, 2021

## FORMER ROXY CLEANERS SITE 156 Delaware Avenue Delmar, NY 12054

**NYSDEC SITE NO.: 401058** 



#### **PREPARED FOR:**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF ENVIRONMENTAL REMEDIATION 625 BROADWAY, 12<sup>TH</sup> FLOOR ALBANY, NY 12233

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#### **EXECUTIVE SUMMARY**

This Periodic Review Report document provides a written synopsis of work, during the PRR period of January 16, 2018 to January 16, 2021, and its effects on environmental compliance at the Former Roxy Cleaners Inactive Hazardous Waste Disposal Site. Site investigation and remediation is conducted in accordance with the 2016 Site Management Plan (SMP) prepared by CDM Smith, as well as administration provided by the New York State Department of Environmental Conservation (NYSDEC or Department).

#### 1.1 Background

The Former Roxy Cleaners site is located at 156 Delaware Avenue in the town of Bethlehem, Albany County, NY. It is located in a commercial portion of the Town approximately 1 mile south of the City of Albany. Figure 1 provides additional information on general site location. Roxy Cleaners dry cleaning facility operated for many decades where dry cleaning activities occurred onsite. Dry cleaning activities are no longer conducted on the premises. Currently, the site consists of a gravel parking area and a two story building.

The former dry cleaning operation reportedly resulted in contamination of soil and groundwater due to Chlorinated Volatile Organic Compounds (CVOCs). The former Dry cleaner building was razed in December, 2014 and soil excavation/removal was completed in 2016. After soil removal, in-situ chemical oxidation was deployed in the excavation and backfill. The new soil cover system included compounds to induce chemical oxidation and reduce contamination in the soil and groundwater.

A subslab depressurization system (SSDS) was installed at the rear of 154 Delaware. The SSDS intends to depressurize the space beneath the concrete slab relative to the pressure of the indoor air. This generates a relative vacuum which limits vapors from migrating into the building through potential cracks or gaps in the floor. The SSDS remains in operation as of the date of this report.

#### 1.2 Effectiveness and Compliance

The 2016 SMP describes Engineering and Institutional Controls, Site Monitoring requirements, and an Operation and Maintenance Plan. Compliance with the remedial goals was demonstrated though site monitoring and operation & maintenance.

Section 7 of the SMP describes reporting requirements in assessing Effectiveness and Compliance.

• The Department determined PRR reports were to be required every three years instead of annually, as described in the SMP.

- Bi-annual reports were prepared to include results and site information from the following sampling dates:
  - **1**1/15/2018
  - **4/19/2019**
  - **1**1/1/2019
  - **4/14/2020**
  - **1**2/30/2020
- No significant site changes were observed to occur over the period of this PRR, including grading, paving, construction, building renovation, etc. Any changes are reported in the bi-annual sampling reports.
- Healthy Pet Center, a pet supply store and a dog rescue shelter, was the main building tenancy at the remaining site structure throughout the PRR period. The dog rescue shelter occupies much of the space above the subslab depressurization system.

#### 1.2.1 Engineering Controls

The sub-slab depressurization system includes one suction point below the basement building slab. It appeared to operate satisfactorily during the reporting period and the manometer read 2.6" WC. No obvious wear was observed during site inspections or review.

#### 1.2.2 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. No significant change in site or potable water use occurred in 2017 and thus compliance with these controls was satisfied.

#### 1.2.3 Monitoring and Operation & Maintenance

Groundwater monitoring was completed at the site. Analytical results indicate COCs likely have diminished at the site. Minor, and likely insignificant, delays described herein due to weather and covid-19 concerns were encountered. No effect on the results is likely.

#### 1.3 Recommendations

Concentrations of contaminants in groundwater indicate the continued need for operation of the implemented Engineering /Institutional Controls at the site. However, bi-annual sampling does appear to be necessary based on consistent sampling results over the years. Sampling once per year is recommended.

#### **SITE OVERVIEW**

The Former Roxy Cleaners site is located at 156 Delaware Avenue in the town of Bethlehem, Albany County, NY. It is located in a commercial portion of the Town approximately 1 mile south of the City of Albany. Figure 1 provides additional information on general site location.

The Property is on which the site is located is 1.1 acres and is known as Albany County Tax Parcel 86.10-02-01. Figure 2 is a Parcel Map obtained from the Albany County Graphic Information System. The Site, more fully described in Section 3.0, is the north portion of the parcel. This is depicted on Figure 3, an excerpt from the August 6, 2010 Boundary Survey by C.T. Male Associates, P.C.

According to the Record of Decision, the site was originally developed as a bus depot until circa late 1950s or early 1960s. After the bus depot, the site was a Roxy Cleaners dry cleaning facility for many decades where dry cleaning activities occurred on-site. Dry cleaning activities are no longer conducted on the premises. Currently, the site consists of a gravel parking area and a two story building.

The retail dry cleaning operations reportedly resulted in contamination of soil and groundwater due to tetrachloroethylene (PCE), trichloroethylene (TCE), dichloroethylene (DCE), and vinyl chloride. According to the Final Engineering report prepared by CDM Smith, after site planning, investigation and design:

- the former Roxy Dry cleaner building was razed in December, 2014
- soil excavation/removal was completed in 2016.
- After soil removal, in-situ chemical oxidation was deployed in the excavation and backfill.
- A subslab depressurization system (SSDS) was installed at the rear of the 154 Delaware building.

For reference purposes only, select Figures from the Final Engineering Report prepared by CDM Smith are attached in report Figures.

The soil cover system was clean fill over backfill amended with Daramend®, a dry powder that contains controlled-release carbon, zero valent iron particles and nutrients to encourage chemical oxidation of Chlorinated Volatile Organic Compounds (CVOCs). The Daramend® layer was installed below the groundwater table within the excavation, intending to become saturated to induce oxidation.

The SSDS intends to depressurize the space beneath the concrete slab relative to the pressure of the indoor air. This generates a relative vacuum which limits vapors from migrating into the building through potential cracks or gaps in the floor. The SSDS remains in operation as of the date of this report.

#### 3.0 EC/IC Environmental Easement Area

Section 2.1 of the Site Management Plan states ..." The Site is located on a 1.1-acre area and is bounded by Delaware Ave to the north, ... The boundaries of the Site are more fully described in **Appendix X** – EE of the FER. The area of the site is approximately 12,143 SF per the Environmental Easement description in Appendix X of the Final Engineering Report:

County: Albany Site No: 401058 Order on Consent Index: A4-0840-14-10

#### SCHEDULE "A" PROPERTY DESCRIPTION

#### ENVIRONMENTAL EASEMENT DESCRIPTION

All that certain tract, piece or parcel of land situate in the Town of Bethlehem, County of Albany, State of New York, lying Southerly of Delaware Avenue, and being more particularly bounded and described as follows:

BEGINNING at the point of intersection of the division line between the lands now or formerly of A Lot in Delmar, Inc. as described in Book 2525 of Deeds at Page 531 and Book 2525 of Deeds at Page 535 on the East and the lands now or formerly of the City of Albany (water line right-of-way) on the West with the Southerly 1995 highway boundary of Delaware Avenue (Delaware Turnpike, Part 2 (S.H. No. 41) and runs thence from said point of beginning along said 1995 highway boundary the following two (2) courses:

- (1) North 74 deg. 05 min. 42 sec. East 67.51 feet to a point; and
- (2) North 73 deg. 08 min. 41 sec. East 0.97 feet to a point;

Thence through the lands now or formerly of A Lot in Delmar, Inc. the following two (2) courses:

- (1) South 01 deg. 06 min. 52 sec. West 197.12 feet to a point; and
- (2) North 89 deg. 19 min. 49 sec. West 64.10 feet to its point of intersection with the above first mentioned division line;

Thence along said above first mentioned division line North 00 deg. 40 min. 11 sec. East 177.56 feet to the point or place of beginning and containing 12,143± square feet or 0.28 acre of land, more or less.

#### 4.0 EC/IC Compliance and Evaluation of performance, effectiveness, and protectiveness

Engineering controls on the site are:

• sub slab depressurization system at the adjoining building at 154 Delaware.

Institutional Control on the site is agreement to the 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;
- 4.1 Sub slab depressurization system (SSDS)
  In 2016, a sub-slab depressurization system with one suction point was installed to create a negative pressure gradient between the basement and the area beneath the building slab. Vapor from beneath the slab is vented above the roofline of the 154 Delaware Building. (See CDM Smith Figure 2-5).

During this monitoring period the system operated well as described in each of the bi-annual sampling reports. Vacuum beneath the slab was documented through visual inspection of the system and the manometer. Due to covid-19 concerns at the Healthy Pet Center tenancy at 154



Delaware, access to document the manometer was not provided during the 2020 time period. When observed in February, 2021 the manometer read 2.6" WC, demonstrating sub-slab de-pressurization.

#### 4.2 *Institutional controls*

Institutional Control on the site is current as described below: Limit the use and development of the property to restricted residential use, which would also permit commercial or industrial uses;

The site is currently vacant and partially used for automobile parking.

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

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

Since the site is currently vacant, no water service is required. Public water is currently provided to the adjoining 154 Delaware building.

#### 5.0 MONITORING/OPERATION & MAINTENANCE

Site Monitoring is provided to evaluate the performance and effectiveness of the remedy:

- SSDS to control concentrations of Site contaminants in indoor air;
- Groundwater testing to review for residual contamination.

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

Monitoring Program	Frequency	Matrix	Analysis
SSDS	Semi-annual monitoring	Vacuum maintained under the basement slab of 156 Delaware Avenue	Measurement of SSDS vacuum, using manometer
Groundwater	Semi-annual monitoring	Groundwater in the monitoring wells, (subject to adjustment by the NYSDEC)	VOCs by EPA Method 8260C
General System Piping & Fittings	Annual monitoring	N/A	Visual
Inline Fan	Semi-annual monitoring	>0-1.7" WC	Gage pressure

#### 5.1 SSDS Monitoring

Hennessy Engineering provides the SSDS Monitoring. The manometer is located in the rescue dog area in the Healthy Pet Center, 154 Delaware Avenue. It was observed and documented to read 2.6" WC, thus documenting negative pressure exists under the slab inhibiting any residual vapors from migrating into the above grade building.

#### 5.2 Groundwater Monitoring

According to the Site Management Plan, groundwater monitoring is proposed to be completed semi-annually (approximately every 6 months) for the purpose of monitoring levels of

chlorinated VOCs and tracking the effectiveness of the Daramend application. Modification to the frequency or sampling requirements will require approval from the NYSDEC

5.2.1 Groundwater sample collection. This activity typically includes water level measurements, monitoring well inspection, and groundwater sampling.

Groundwater sample collection was sampling and purging by bailer per Section 3 of the Quality Assurance Plan addition to determining the depth to groundwater, select monitoring wells were purged of a minimum of three well volumes by 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 Alpha Analytical Laboratory Buffalo, NY (ELAP #11148) and samples from each monitoring well were analyzed via EPA Method 8260C.

During the 2020 monitoring period, groundwater sampling occurred April 14, 2020 and Dec. 30, 2020/Jan. 11, 2021. Due to covid-19 concerns and a snowstorm, the second biannual sampling was delayed and not able to be completed until December 30, 2020. As such, MW-1 was covered by a plowed snowbank and unable to be sampled until January 11, 2021.

Also, due to this timing, the sampling subcontractor was not available, requiring the consultant to collect the samples. No water interface probe was available, thus purge volumes could not be calculated. Thus volumes of 5 gallons for shallow wells and 10 gallons for deep wells was assumed for this event only.

5.2.2 Quality Assurance activities. Initial sampling events in 2018 and 2019 included duplicate, field blank and trip blank. Data validation/assessment was not understood to be required. No significant consistencies or anomalies were discovered. Sampling requirements in 2019 were increased to include emerging contaminants. Due to these budgetary increases, subsequent sampling events eliminated the duplicate, trip and field blanks and relied upon laboratory QA/QC procedures. Since the emerging contaminants are no longer required, QA/QC procedures such as duplicate sample, trip and field blanks can be added if required. Matrix spikes are requested to not be required.

During well purging, MW-2R recharged quickly. It is the only shallow well located in the prior site excavation/backfill area. Soils from the well log indicate very gravelly silty sand backfill whereas the other shallow overburden monitoring wells were in silty clay soil. This my cause more surface water percolation into the excavation area and perched conditions since surrounding soil is silty clay.

Per Table 1, constituents of concern, including PCE and its daughter compounds, were found in site monitoring wells. These results were relatively consistent with prior results, except for MW-1, which is outside the easement and downstream. PCE results decreased from 6,100  $\mu g/L$  in 4/19 to 2500  $\mu g/L$  in 12/19 to 2  $\mu g/L$  in 4/20, but then increased to 9,000  $\mu g/L$  in the

12/20. The cause for this is unknown, it could be an anomaly or to groundwater fluctuations, possibly connected to effects of the excavation perched groundwater. Table 2 presents all analyte results for all collected samples.

#### **Emerging Contaminants**

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

- 1,4-dioxane via method 8270D SIM analysis;
- PFOAs by method 537(mod) the latest NYSDEC list of 21 analytes for PFOA.

November 17, 2018 sampling included MW-2DR (onsite) and MW-4 (upgradient). April 18, 2019 included MW-2 (onsite) and MW-1 (downgradient). (Please note the SMP stated MW-1 was on-site, however, based on the maps provided and the well logs, MW-1 is estimated to be 10-20' downgradient of the excavation site.)

As listed in Table 1, no contaminants were detected above laboratory detection limits in MW-2DR. Several PFAs compounds were detected in MW-1 and MW-4, however the highest was 6.19 ng/L of PFOA in the "duplicate" sample (which was MW-1). This is below the current assumed guideline (at the time) of 70  $\mu$ g/L. The NYSDEC published new guidance dated January 2021, whereby 10  $\mu$ g/L is the threshold of concern. PFAs detections on site comply with this updated guidance.

Based on the results, further sampling of these compounds was not recommended by Hennessy Engineering or required through correspondence with the DEC.

#### 5.3 General System Piping & Fittings

The only visible elements of system piping and fittings include the exterior SSDS fan and its components. Monitoring well covers/casings have been added to this category for report convenience.

The fan and piping was observed to be intact and in good condition. The pipe is a 6" diameter PVC pipe connecting the Radonaway fan on the bldge exterior to the sub-slab system. No evidence of wear or physical damage was observed.

Leakage from surface water was observed in Monitoring wells 1, 3, 4, 5, and 6. These were originally installed in 2011. The gaskets as well as the washers for each bolt should be replaced. The well caps were satisfactory but no locks were observed.

#### 5.4 In-line Fan

The radonaway fan was observed to be intact and in good condition It was not gauged for inline pressure because an access port was not observed and the manometer reading on the pipe was assumed to be adequate at this time. The manometer was observed and documented to read 2.6" WC, thus documenting negative pressure exists under the slab inhibiting any residual vapors from migrating into the above grade building.

#### 6.0 CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 *SMP Compliance*

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:

- sub slab depressurization system;
- Site environmental easement.

#### 6.2 Performance and Effectiveness of the Remedy

Successful implementation of each component of the remedy contributed to achievement of remedial objectives for the site.

• Except for MW-1, groundwater monitoring indicates an overall decrease in COCs in site wells.

Concentrations of contaminants in groundwater indicate the continued need for operation of the implemented Engineering Controls (ECs) at the site.

#### 6.3 Groundwater Monitoring

Over the PRR period, groundwater results were generally consistent with some clear moderations. Emerging contaminants levels appeared low. Covid-19 concerns have impacted both economic resources at the site as well as the physical efforts completing the work. As such we recommend the DEC consider only annual sampling to reduce the burden on the landowner.

Monitoring wells 1, 3, 4, 5, and 6 require repair. New gaskets, washers locks, and bolts should be replaced at a minimum. Part of this work was completed at the July 2, 2021 sampling event. Remaining work is scheduled for the Oct/Nov sampling event.

#### 154 Delaware Avenue, Delmar, NY 12054

	TABLE 1																																													
	6/28	11/3,							DET	ECTI	ONS (	rour	dwat	er Ana	lytical	Sumi	mary																													
Analyte	****							4/19/2019						11/1/2019						4/14/2020						12/30/2020						N/0050 OW														
CVOCS - E 8260C	PA MW-1	MW-1*2	MW-1	MW- 2R	MW- 2DR	MW-3	MW-4	MW-	5 MW-6	MW-	-1 MW-	MW 2DR	MW-	3 MW-4	MW-4 DUP	MW-5	MW-6	MW-1	MW- 2R	MW- 2DR	MW-3	MW-4	MW-1 DUP	MW-5	MW-6	MW-1	MW- 2R	MW- 2DR	MW-3	MW-4	MW-5 M	W-6 MV	V-1	/IW- M	W- DR	3 MW	-4 MW-	-5 MW-6	MW- 1 <sup>*4</sup>	MW- 2R	MW- 2DR	MW-3	MW-4	MW-5		NYSDEC GW Standard <sup>*1</sup>
cis 1,2 dichloroethene	2600	j 2200	2400	ND	ND	690	ND	2	1 6.2	340	10 NI	2.	0 1	4 1.3	-	43	19	4,300	ND	ND	1,100	0.80	-	38	16	590	ND	ND	1,600	ND	ND	12	1	ND	ND 1,30	0 1.0	) j 5	22.00	3,800	NE	O ND	890	0.79	J 34	20	5
Trichloroethene	2700	j 2400	3200	ND	7.4	170	ND	NE	) NE	260	10 NI	N	3.5	0 NE	-	1.40	0.28	2,900	ND	0.96	ND	ND	-	1.30	0.32	500	2.00	ND	28	ND	ND (	0.24	2	ND 1	.10 30	00 N	ID 1.	.8 0.38	j 3,300	NE	0.19J	140	NE	0.92	0.26J	5
Tetrachloroethene	7100	j 6100	9700	ND	9.1	90	ND	NE	) NE	800	10 NI	N	3.4	<b>0</b> NE	-	1.30	0.27	6,100	ND	6.10	210	ND	-	1.70	)	2,500	7.30	ND	32	ND	ND	ND	22	ND	4.0 19	00 N	ID 1.	.9 NE	9000E	NE	1.7	130.0	NE	0.53	ND	5
acetone	N/A	N/A	ND	15	ND	ND	ND	NE	) NE	N	D 3.2	2.1	0 7.0	0 NE	-	1.60	ND	ND	3.80	7.90	ND	12.0	-	3.90	5.40	ND	9.4	61	ND	5.8	9.40	10	78	95	25 5	2 1.8	3 j 23	33.00	58	430E	E 1.7j	ND	NE	) ND	ND	5
VINYL CHLORIDE	380	380	ND	ND	ND	230	ND	10	6 NE	41	0 0.3	0.5	2 4.3	0 0.29	-	17.00	2.90	640	0.15	ND	470	ND	-	27	1.70	78	0.08	ND	300	ND	0.42	2	ND 0	.12 j 0.	17 j 72	0.16	3 j 4	1.90	500	NE	) ND	170	0.16	J 11	0.52J	2
2 butanone	N/A	N/A	ND	ND	ND	150	ND	NE	) NE	N	D NI	N	D N	D NE	-	ND	ND	ND	ND	ND		ND	-			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND N	D N	ID N	D ND	) ND	NE	) ND	ND	NE	ND.	ND	
1, 1 DCE	NE	ND	ND	ND	ND	ND	ND	NE	) NE	N	D NI	N	D N	D NE	ND	ND	ND	ND	ND	ND	2.90	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND 4.6	j N	D 0.32	2 j NE	4.6	i NE	) ND	ND	NE	ND.	ND	5
trans 1,2 DCE	NE	ND	ND	ND	ND	ND	ND	NE	) NE	N	D NI	N	D N	D NE	ND	ND	ND	ND	ND	ND	12.00	ND	ND	1.2	. ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND 19	j N	D 2.0	) j NE	240	NE	) ND	ND	NE	) ND	ND	5
Benzene	NE	ND	ND	ND	ND	ND	ND	NE	) NE	N	D <b>0.4</b>	5 N	D N	D NE	ND	ND	ND	ND	0.34	ND	ND	ND	ND	ND	ND	ND	ND	0.63	ND	ND	ND	ND	ND	0.65	ND N	D N	ID N	D ND	) ND	NE	) ND	ND	NE	) ND	ND	1
Toluene	NE	ND	ND	ND	ND	ND	ND	NE	) NE	N	D <b>0.7</b>	B N	D N	D NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND N	D N	ID N	D ND	) ND	NE	) ND	ND	NE	) ND	ND	5
EMERGING CONTAMINANTS																																														NYSDEC GW Standard <sup>*3</sup>
1,4-dioxane (ng/L)												N	D	NE				ND				ND	ND																							NA
PFBA (ng/L)												N	D	1.35	1.40			4.08				1.23	4.15																							10 ng/L*3
PFHxS (ng/L)												N	D	0.61	ND			2.18				ND	1.89																							10 ng/L*3
PFOA (ng/L)												N	D	1.15	1.17			6.12				1.19	6.19																							10 ng/L*3
NEtFOSAA (ng/L)												N	D	NE	0.35			ND				ND	ND																							10 ng/L*3
PFPea																		2.51				ND	2.68																							10 ng/L*3
PFBS																		2.63				ND	2.61																							10 ng/L*3
PFHxA																		2.59				ND	2.49																							10 ng/L*3
PFHpA										I								1.75				ND	1.67																							10 ng/L*3
6:2FTS										I								0.28				ND	0.36																							10 ng/L*3
PFNA										I								0.55				ND	0.51																							10 ng/L*3
PFOS																		0.55 1.75				0.73	1.56																							10 ng/L <sup>*3</sup>

<sup>\*1 = 6</sup> NYCRR Part 703.5 Surface and Groundwater Quality Standards.

<sup>•4</sup> = Jan. 11, 2021 sample date

Laboratory analysis performed by Alpha Environmental

All results reported in ug/l (parts per billion) unless otherwise noted

E = exceeded instrument calibration

j = estimated value

ND = Not detected above the laboratories method detection limit

N/A = Not Applicable/Not Available

RL = Laboratory Reporting Limit

<sup>\*2 = 2011</sup> Results from NYSDEC Remedial Investigation

<sup>&</sup>lt;sup>13</sup> = Jan. 2021 NYSDEC PFAS Sampling Analysis and Assessment

## 154 Delaware Avenue, Delmar, NY 12054 TABLE 2

	0.1100 - :-	anr I	MIN 005 - 1	MIN OUT	.me 1	ana - I	.n1		.m 1	.m.,1						.may 1		.mu c1	.ma I	aner of	.m	104.5			.mu		an	une . I	*******	1
	SAMPLE ID: LAB ID:	MW-01 L1916273-02	MW-02DR L1916273-04	MW-02R L1916273-05	MW-03 L1916273-06	MW-04 L1916273-01	MW-05 L1916273-07	MW-06 L1916273-08	MW-01 L1951917-01	MW-02 L1951917-02	MW-02D L1951917-03	MW-03			MW-05 1917-06	MW-06 L1951917-07	MW-1 L2015716-01	MW-2DR L2015716-02	MW-2R L2015716-03	MW-3 L2015716-04	MW-4 L2015716-05	MW-5 L2015716-06			MW-2DR L2100343-05	MW L2100343		MW-4 L2100343-01	MW-5 L2100343-02	MW-6 L2100343-03
	COLLECTION DATE:	4/19/2019	4/19/2019	4/19/2019	4/19/2019	4/19/2019	4/19/2019	4/19/2019	11/1/2019	11/1/2019	11/1/2019	11/1/2019			/1/2019	11/1/2019	4/14/2020	4/14/2020	4/14/2020	4/14/2020	4/14/2020	4/14/2020		1/11/2021	12/30/2020	12/30/2		12/30/2020	12/30/2020	12/30/2020
	WQS																													
ANALYTE	(ug/l)	Conc Q RL	Conc Q RL C	onc Q RL Cor	nc Q RL	Conc Q RL	Conc Q RL	Conc Q RL	Conc Q RL	Conc Q RL	Conc Q RL	Conc Q RL	Conc Q	RL Conc Q	RL Con	nc Q RL	Conc Q RL	Conc Q RL	Conc Q RL	Conc Q RL	Conc Q RL	Conc Q RL	Conc Q RL	Conc Q RL	Conc Q RL	Conc Q F	L Conc Q RL	Conc Q RL	Conc Q RL Conc	c Q RL
VOLATILE ORGANICS BY GC 1,1,1-Trichloroethane	MS	ND 120	ND 26	ND 25 NE	26	ND 26	ND 2.5	ND 26	ND 60	ND 26	ND 26	ND 60	ND	2.6 ND	2.6 ND	D 25	ND 26	ND 26	ND 26	ND 26	ND 26	ND 25	ND 26	ND 62	ND 25	ND I	ND 12	ND 26	ND 26 ND	2.5
1,1,2,2-Tetrachloroethane	5	ND 120		ND 0.5 NE	) 25	ND 2.5			ND 10	ND 0.5	ND 2.5	ND 10	ND ND	0.5 ND	0.5 ND	D 0.5	ND 2.5	ND 2.5	ND 2.5	ND 5	ND 0.5	ND 0.5	ND 2.5	ND 62	ND 2.5	ND :	ND 12	ND 2.5	ND 0.5 ND	0.5
1,1,2-Trichloroethane	1	ND 75	ND 1.5	ND 1.5 NE	) 15	ND 1.5	ND 1.5	ND 1.5	ND 30	ND 1.5	ND 1.5	ND 30	ND	1.5 ND	1.5 ND	D 1.5	ND 1.5	ND 1.5	ND 1.5	ND 15	ND 1.5	ND 1.5	ND 1.5	ND 38	ND 1.5	ND :	3 ND 7.5		ND 1.5 ND	1.5
1,1-Dichloroethane	5	ND 120				ND 2.5			ND 50						2.5 ND		ND 2.5 ND 0.5							ND 62 4.6 J 12			ND 12			
1,1-Dichloroethene 1,2,3-Trichlorobenzene	5	ND 25 ND 120			) 25	ND 0.5			ND 50					2.5 ND	2.5 ND		ND 0.5	ND 0.5				ND 2.5		4.6 J 12 ND 62	ND 0.5		1 2 J 2.5 5 ND 12		ND 0.5 ND ND 2.5 ND	
1,2,4-Trichlorobenzene	5	ND 120 ND 120	ND 2.5	ND 2.5 NI	25	ND 2.5	ND 2.5	ND 2.5	ND 50	ND 2.5	ND 2.5	ND 50	ND :	2.5 ND	2.5 ND	D 2.5	ND 2.5	ND 2.5	ND 2.5	ND 25	ND 2.5	ND 2.5	ND 2.5	ND 62	ND 2.5	ND :	5 ND 12	ND 2.5	ND 2.5 ND	2.5
1,2-Dibromo-3-chloropropane	0.04	ND 120	ND 2.5	ND 2.5 NE	25	ND 2.5	ND 2.5	ND 2.5	ND 50	ND 2.5		ND 50		2.5 ND 2 ND	2.5 ND	D 2.5	ND 2.5		ND 2.5	ND 25	ND 2.5	ND 2.5 ND 2	ND 2.5	ND 62 ND 50	ND 2.5		ND 12	ND 2.5		2.5
1,2-Dibromoethane 1,2-Dichlorobenzene	0.0006	ND 100 ND 120				ND 2 ND 2.5			ND 40 ND 50			ND 40			2 ND		ND 2 ND 2.5					ND 2.5		ND 50 ND 62			ND 10 ND 12			
1,2-Dichloroethane	0.6	ND 25				ND 0.5			ND 10						0.5 ND		ND 0.5							ND 12			ND 2.5			
1,2-Dichloropropane	1	ND 50	ND 1	ND 1 NE		ND 1	ND 1		ND 20	ND 1	ND 1	ND 20	ND	1 ND	1 ND	D 1	ND 1	ND 1		ND 10	ND 1	ND 1	ND 1	ND 25	ND 1	ND :	2 ND 5	ND 1	ND 1 ND	1
1,3-Dichlorobenzene	3	ND 120	ND 2.5		25	ND 2.5			ND 50					2.5 ND	2.5 ND		ND 2.5					ND 2.5		ND 62	ND 2.5		ND 12			2.5
1,4-Dichlorobenzene 1,4-Dioxane	3	ND 120 ND 12000	ND 2.5 ND 250	ND 250 NE	25 2500	ND 2.5 ND 250	ND 2.5 ND 250	ND 2.5	ND 50 ND 5000	ND 2.5 ND 250	ND 2.5 ND 250	ND 5000	ND 2	2.5 ND 250 ND	2.5 ND 250 ND	D 250	ND 250	ND 2.5 ND 250	ND 2.5 ND 250	ND 25 ND 2500	ND 250	ND 2.5 ND 250	ND 250	ND 6200	ND 250	ND 5	5 ND 12 00 ND 1200	ND 2.5 ND 250	ND 250 ND	250
2-Butanone	50	ND 250	ND 5 1	ND 5 NI	50	ND 5	ND 5	ND 5	ND 100	ND 5	ND 5	ND 100	ND	5 ND	5 ND	D 5	ND 5	ND 5	ND 5	ND 50	ND 5	ND 5	ND 5	ND 120	ND 5	ND 1	0 ND 25	ND 5	ND 5 ND	5
2-Hexanone	50	ND 250 ND 250	ND 5	ND 5 NE	50	ND 5	ND 5	ND 5	ND 100	ND 5	ND 5	ND 100	ND	5 ND	5 ND	D 5	ND 5	ND 5	ND 5	ND 50	ND 5	ND 5	ND 5	ND 120	ND 5	ND 1	0 ND 25	ND 5	ND 5 ND	5
4-Methyl-2-pentanone Acetone	50	ND 250 ND 250	ND 5		50	ND 5	ND 5 3.9 J 5	54 5	ND 100	9.4 5	ND 5	ND 100	ND 5.8	5 ND 5 94	5 ND	0 5	ND 5	ND 5 25 5	ND 5	52 50	ND 5	ND 5	33 5	ND 120 58 J 120	17 J 5	ND 1	0 ND 25 0 8.3 J 25	ND 5	1.6 J 5 ND	5
Benzene	1	ND 25	ND 0.5 0	0.34 J 0.5 NE	5	ND 0.5	ND 0.5	ND 0.5	ND 100					0.5 ND	0.5 ND	D 0.5	ND 0.5			ND 5	ND 0.5	ND 0.5	ND 0.5				ND 2.5	ND 0.5	ND 0.5 ND	0.5
Bromochloromethane	5	ND 120 ND 25			) 25 ) 5			ND 2.5	ND 50 ND 10		ND 2.5	ND 50	ND :		2.5 ND 0.5 ND		ND 2.5 ND 0.5		ND 2.5			ND 2.5 ND 0.5		ND 62	ND 2.5		5 ND 12	ND 2.5		
Bromodichloromethane Bromoform	50 50	ND 25 ND 100	ND 0.5 I	ND 0.5 NE ND 2 NE		ND 0.5 ND 2	ND 0.5 ND 2	ND 0.5	ND 10 ND 40	ND 0.5 ND 2		ND 10 ND 40		0.5 ND 2 ND	0.5 ND 2 ND	D 0.5	ND 0.5 ND 2	ND 0.5 ND 2	ND 0.5	ND 5 ND 20	ND 0.5	ND 0.5 ND 2	ND 0.5	ND 12 ND 50	ND 0.5	ND ND	ND 2.5 ND 10	ND 0.5 ND 2	ND 0.5 ND ND 2 ND	0.5
Bromonethane	50	ND 100	ND 2.5	ND 2.5 NI		ND 2.5			ND 50						2.5 ND		ND 2.5							ND 50			ND 10			
Carbon disulfide	60	ND 250 ND 25	ND 5 ND 0.5	ND 5 NE	50	ND 5		ND 5	ND 100	ND 5	ND 5		ND	5 ND	5 ND	D 5	ND 5	ND 5	ND 5	ND 50	ND 5	ND 5	ND 5	ND 120	ND 5		0 ND 25	ND 5	ND 5 ND	5
Carbon tetrachloride	5								ND 10						0.5 ND		ND 0.5							ND 12						
Chlorobenzene Chloroethane	5					ND 2.5 ND 2.5			ND 50						2.5 ND 2.5 ND		ND 2.5 ND 2.5							ND 62 ND 62				ND 2.5 ND 2.5		
Chloroform	7	ND 120 ND 120 ND 120	ND 2.5	ND 2.5 NE	25	ND 2.5 ND 2.5	ND 2.5		ND 50 ND 50	ND 2.5	ND 2.5		ND :		2.5 ND		ND 2.5	ND 2.5	ND 2.5	ND 25	ND 2.5	ND 2.5	ND 2.5	ND 62	ND 2.5	ND :		ND 2.5	ND 2.5 ND	2.5
Chloromethane				ND 2.5 NE		ND 2.5	ND 2.5		ND 50					2.5 ND	2.5 ND	D 2.5		1.2 J 2.5					0.96 J 2.5	ND 62			5 ND 12	ND 2.5	ND 2.5 ND	2.5
cis-1,2-Dichloroethene	5 0.4	4300 120	ND 2.5 ND 0.5	ND 2.5 110	00 25	0.8 J 2.5	38 2.5	16 2.5	590 50	ND 2.5	ND 2.5 ND 0.5		ND :	2.5 1.3 J	2.5 12	2 2.5	0.8 J 2.5	ND 2.5	ND 2.5	1300 25	1 J 2.5	55 2.5 ND 0.5	22 2.5	3800 62	ND 2.5	ND !	890 12	0.79 J 2.5	34 2.5 20	2.5
cis-1,3-Dichloropropene Cyclohexane	0.4	ND 25 ND 500	ND 10	ND 10 NE	0 100	ND 0.5	ND 0.5	ND 0.5	ND 200	ND 10	ND 10	ND 200	ND ND	10 ND	10 ND	D 10	ND 0.5	ND 10	ND 10	ND 100	ND 10	ND 10	ND 10	ND 12	ND 10	ND 2	0 ND 50	ND 10	ND 10 ND	10
Dibromochloromethane	50	ND 25	ND 0.5	ND 0.5 NE		ND 0.5	ND 0.5	ND 0.5	ND 10	ND 0.5	ND 0.5	ND 10			0.5 ND		ND 0.5							ND 12		ND	I ND 2.5	ND 0.5		
Dichlorodifluoromethane	5	ND 250				ND 5			ND 100			ND 100		5 ND	5 ND		ND 5					ND 5		ND 120		ND 1	0 ND 25			
Ethylbenzene Freon-113	5	ND 120 ND 120	ND 2.5 ND 2.5	ND 2.5 NL ND 2.5 NF	25	ND 2.5 ND 2.5	ND 2.5 ND 2.5	ND 2.5	ND 50 ND 50	ND 2.5 ND 2.5	ND 2.5 ND 2.5	ND 50	ND ND	2.5 ND 2.5 ND	2.5 ND 2.5 ND	D 2.5	ND 2.5 ND 2.5	ND 2.5 ND 2.5	ND 2.5 ND 2.5	ND 25 ND 25	ND 2.5	ND 2.5 ND 2.5	ND 2.5	ND 62 ND 62	ND 2.5	ND S	ND 12 ND 12	ND 2.5 ND 2.5	ND 2.5 ND ND 2.5 ND	
Isopropylbenzene	5	ND 120				ND 2.5			ND 50						2.5 ND	D 2.5	ND 2.5							ND 62			ND 12			
Methyl Acetate		ND 100	ND 2	ND 2 NE	) 20	ND 2	ND 2	ND 2	ND 40	ND 2	ND 2	ND 40	ND	2 ND	2 ND	D 2	ND 2	ND 2	ND 2	ND 20	ND 2	ND 2	ND 2	ND 50	ND 2		ND 10	ND 2	ND 2 ND	2
Methyl cyclohexane	10	ND 500 ND 120			100	ND 10 ND 2.5			ND 200 ND 50			ND 200	ND ND	10 ND 2.5 ND	10 ND 2.5 ND		ND 10 ND 2.5	ND 10 ND 2.5	ND 10 ND 2.5	ND 100 ND 25		ND 10 ND 2.5	ND 10	ND 250 ND 62	ND 10 ND 2.5		0 ND 50 5 ND 12	ND 10 ND 2.5		
Methyl tert butyl ether Methylene chloride	5	ND 120	ND 2.5	ND 2.5 NE	25				ND 50						2.5 ND		ND 2.5					ND 2.5		ND 62			ND 12			
o-Xylene	5	ND 120	ND 2.5	ND 2.5 NE	25	ND 2.5	ND 2.5	ND 2.5	ND 50	ND 2.5	ND 2.5	ND 50	ND .	2.5 ND	2.5 ND	D 2.5	ND 2.5	ND 2.5	ND 2.5	ND 25	ND 2.5	ND 2.5	ND 2.5	ND 62		ND :	5 ND 12	ND 2.5	ND 2.5 ND	
p/m-Xylene	5	ND 120				ND 2.5			ND 50						2.5 ND		ND 2.5					ND 2.5		ND 62	ND 2.5			ND 2.5		
Styrene Tetrachloroethene	930	ND 120 6100 F 25	ND 2.5	ND 2.5 NE	0 25	ND 2.5 ND 0.5		ND 2.5	ND 50	ND 2.5	ND 2.5 ND 0.5			2.5 ND 0.5 ND	2.5 ND 0.5 ND		ND 2.5	ND 2.5 4 0.5		ND 25	ND 2.5	ND 2.5 1.9 0.5		ND 62	ND 2.5	ND :	ND 12	ND 2.5 ND 0.5	ND 2.5 ND 0.53 0.5 ND	2.5
Toluene	5	ND 120	ND 2.5	ND 2.5 NE	25	ND 2.5			ND 50	ND 2.5				2.5 ND	2.5 ND		ND 2.5			ND 25	ND 2.5	ND 2.5		ND 62		ND :	5 ND 12			
trans-1,2-Dichloroethene	5	ND 120	ND 2.5	ND 2.5 12	2 J 25				ND 50			ND 50			2.5 ND		ND 2.5			19 J 25	ND 2.5	2 J 2.5		240 62	ND 2.5		9.7 J 12		0.84 J 2.5 ND	
trans-1,3-Dichloropropene Trichloroethene	0.4	ND 25 2900 25	ND 0.5 0.96 0.5	ND 0.5 NE ND 0.5 19	5	ND 0.5 ND 0.5		ND 0.5	ND 10 500 10			ND 10			0.5 ND	D 0.5 24 J 0.5	ND 0.5 2 0.5	ND 0.5			ND 0.5		ND 0.5	ND 12 3300 12	ND 0.5		ND 2.5		ND 0.5 ND 0.92 0.5 0.26	
Trichlorofluoromethane	5	ND 120				ND 0.5			ND 50						2.5 ND		ND 2.5			ND 25			ND 2.5				ND 12			
Vinyl chloride	2	640 50				ND 1				0.08 J 1				1 0.42 J					0.12 J 1									0.16 J 1	11 1 0.52	
1,4 DIOXANE BY 8270D-SIM			· ·																											
1,4-Dioxane PERFLUORINATED ALKYL AG	IDS BY ISOTOPE	ND 0.139		<u> </u>		ND 0.139																								
Perfluorobutanoic Acid (PFBA)	J.J. D. ISOTOPE L	0.0041 0.002			-	0.0012 J 0.0018																								
Perfluoropentanoic Acid (PFPeA)		0.0025 0.002			-	ND 0.0018																								
Perfluorobutanesulfonic Acid (PFBS Perfluorohexanoic Acid (PFHxA)	)	0.0026 0.002 0.0026 0.002			-	ND 0.0018 ND 0.0018																								
Perfluoronexanoic Acid (PFHxA)  Perfluoronexanoic Acid (PFHpA)		0.0026 0.002 0.0018 J 0.002		· · ·	-	ND 0.0018		<del></del>																						
Perfluorohexanesulfonic Acid (PFHx	S)	0.0022 0.002			-	ND 0.0018																								
Perfluorooctanoic Acid (PFOA)		0.0061 0.002			-	0.0012 J 0.0018																								
1H,1H,2H,2H-Perfluorooctanesulfon Perfluoroheptanesulfonic Acid (PFH		0.0003 J 0.002	-		-	ND 0.0018 ND 0.0018																								
Perfluorononanoic Acid (PFNA)	10)	0.0006 J 0.002			-	ND 0.0018		<del></del>																						
Perfluorooctanesulfonic Acid (PFOS	)	0.0018 J 0.002			-	0.0007 J 0.0018																								
Perfluorodecanoic Acid (PFDA)	-i- A-id (0.0	ND 0.002 ND 0.002			-	ND 0.0018 ND 0.0018																								
1H,1H,2H,2H-Perfluorodecanesulfor N-Methyl Perfluorooctanesulfonamid		ND 0.002 ND 0.002				ND 0.0018 ND 0.0018		<del></del>																						
Perfluoroundecanoic Acid (PFUnA)		ND 0.002				ND 0.0018		<del></del>																						
Perfluorodecanesulfonic Acid (PFDS	)	ND 0.002			-	ND 0.0018																								
Perfluorooctanesulfonamide (FOSA)		ND 0.002 ND 0.002			-	ND 0.0018 ND 0.0018																								
N-Ethyl Perfluorooctanesulfonamido Perfluorododecanoic Acid (PFDoA)	aceuc ACIO (	ND 0.002			-	ND 0.0018 ND 0.0018																								
Perfluorotridecanoic Acid (PFTrDA)		ND 0.002			-	ND 0.0018																								
Perfluorotetradecanoic Acid (PFTA)		ND 0.002			-	ND 0.0018																								
PFOA/PFOS, Total		0.0079 J 0.002			-	0.0019 J 0.0018																								
* Comparison is not performed on pa	arameters with non-num	eric criteria.																												

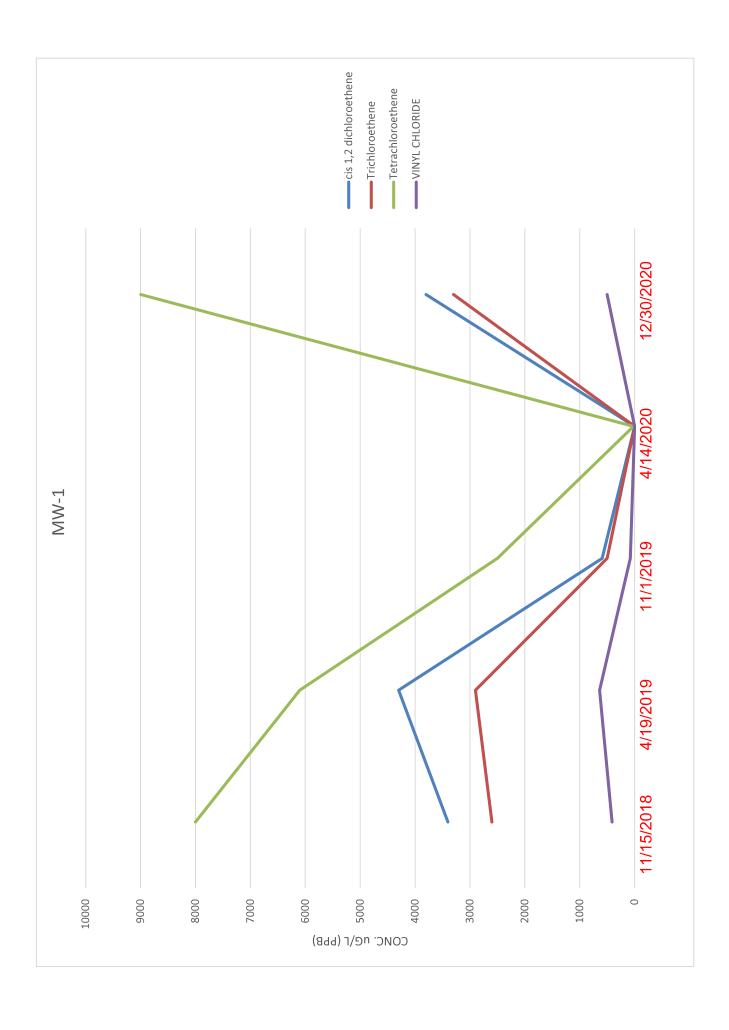
\*Comparison is not performed on parameters with non-numeric criteria.

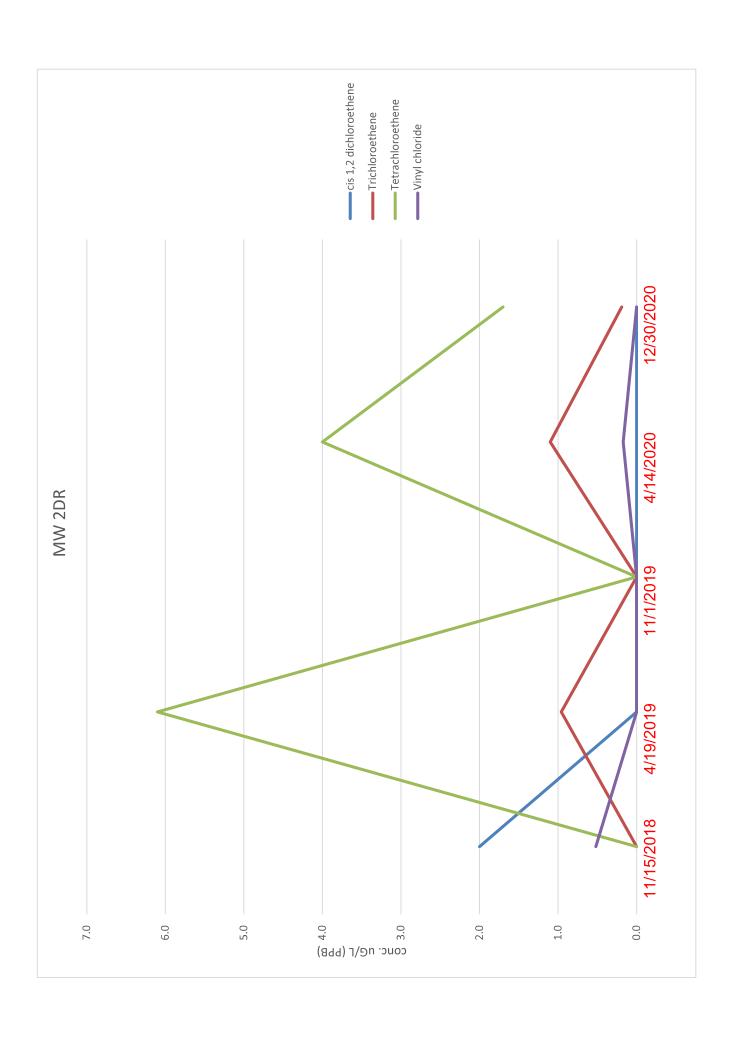
WGS = 6 NYCRR Part 703.5 Surface and Groundwater Quality Standards.

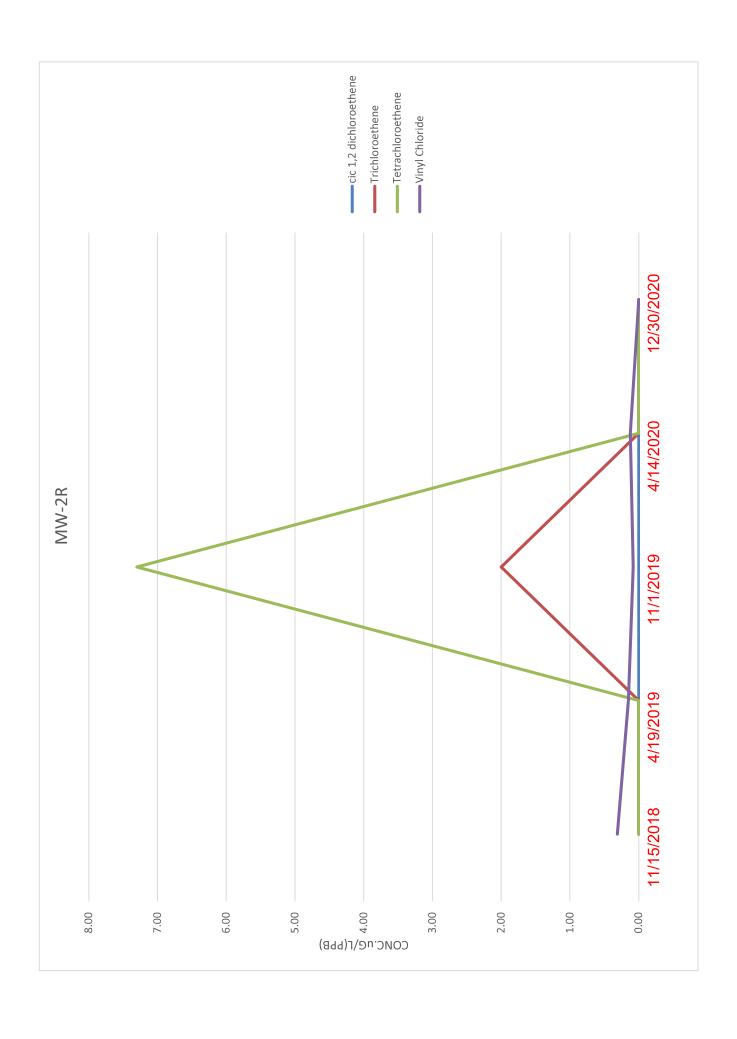
E = exceeded instrument calibration
j = estimated value

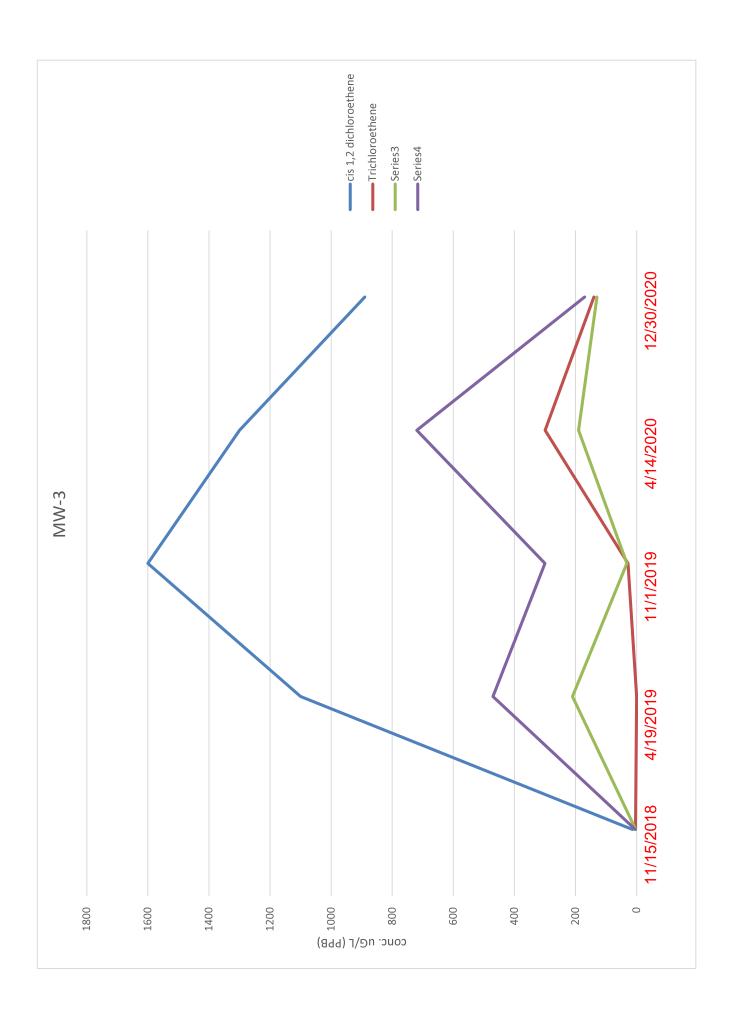
ND = Not detected above the laboratories reporting limit

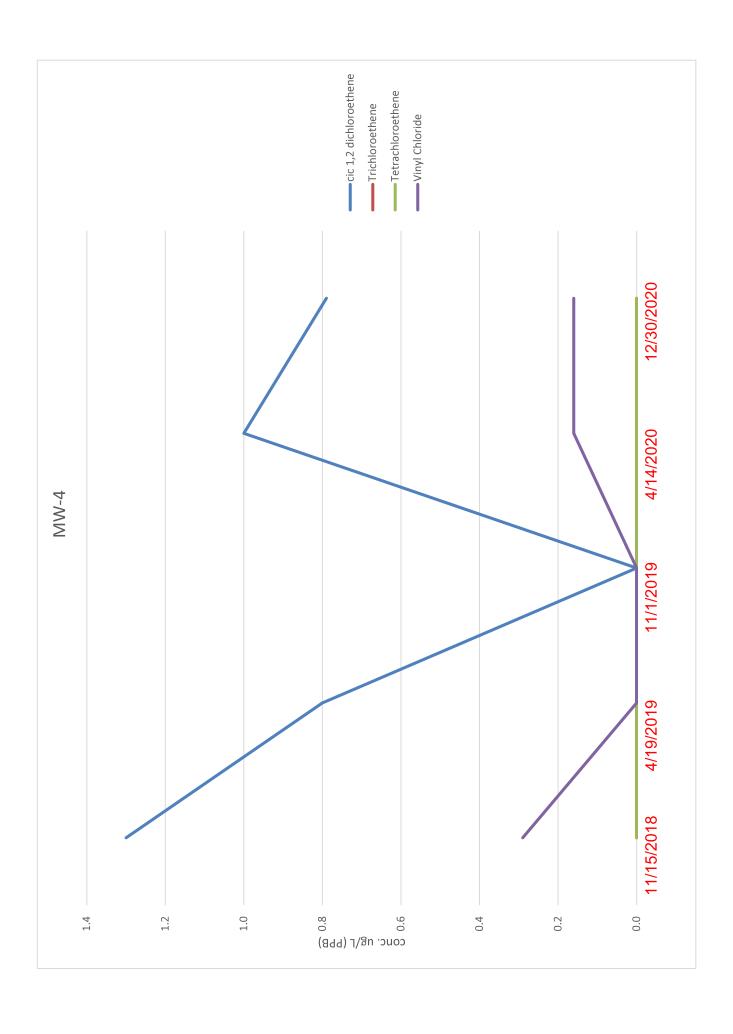




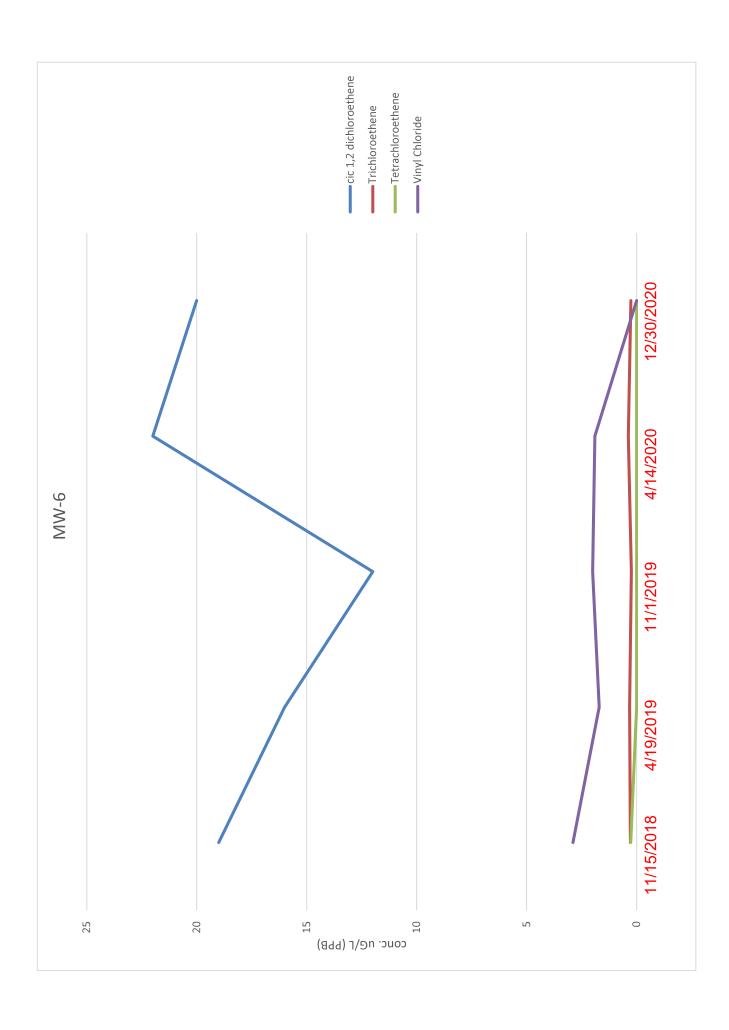




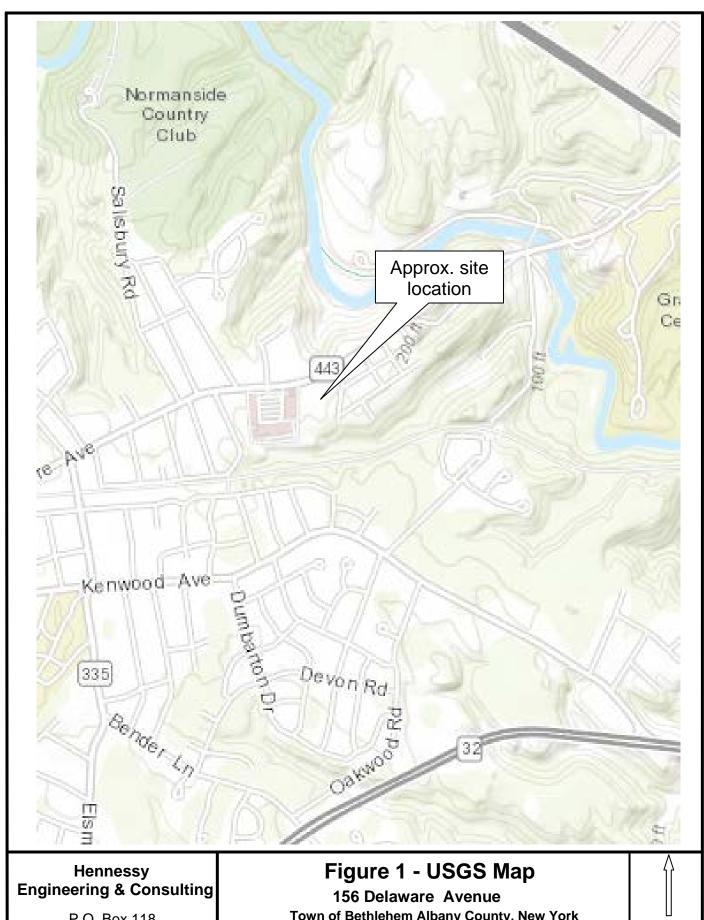








## **FIGURES**



P.O. Box 118 Voorheesville, NY 12186

**Town of Bethlehem Albany County, New York** 

Source: USGS Scale: none





### Hennessy Engineering & Consulting

P.O. Box 118 Voorheesville, NY 12186

## Figure 2 – Aerial/Parcel Map

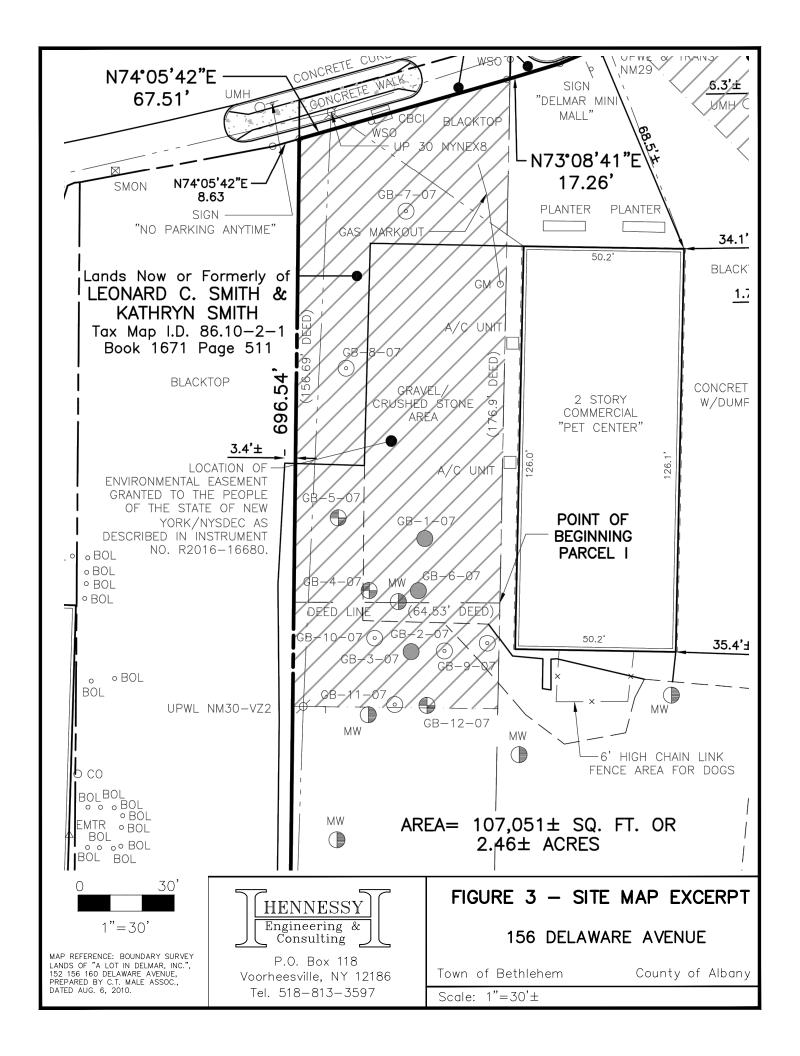
156 Delaware Avenue

Town of Bethlehem Albany County, New York

Source: Albany Co. GIS

Scale: none





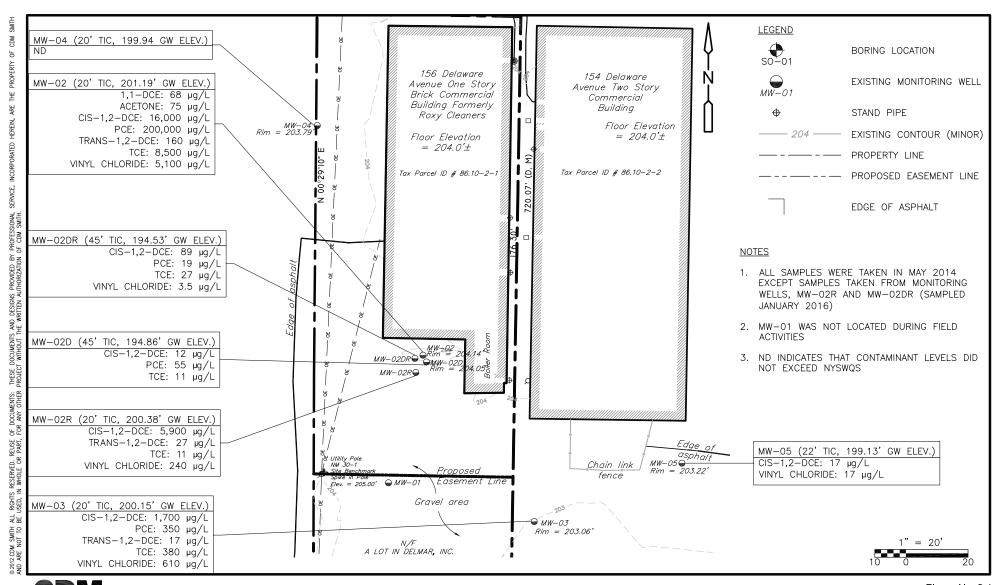




Figure No. 2-1 Former Roxy Cleaners Groundwater TOGS Exceedences

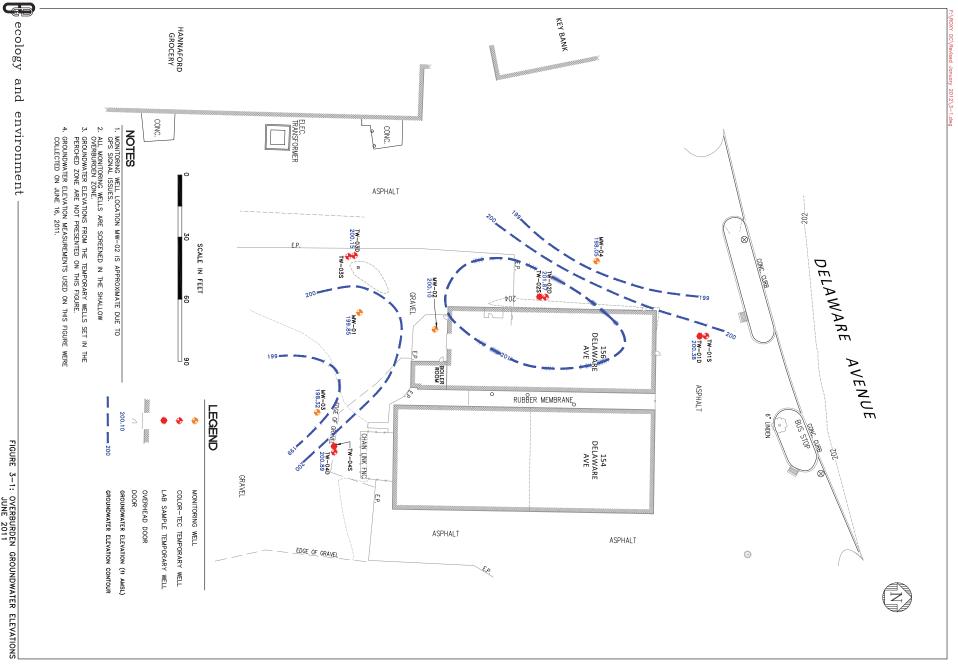
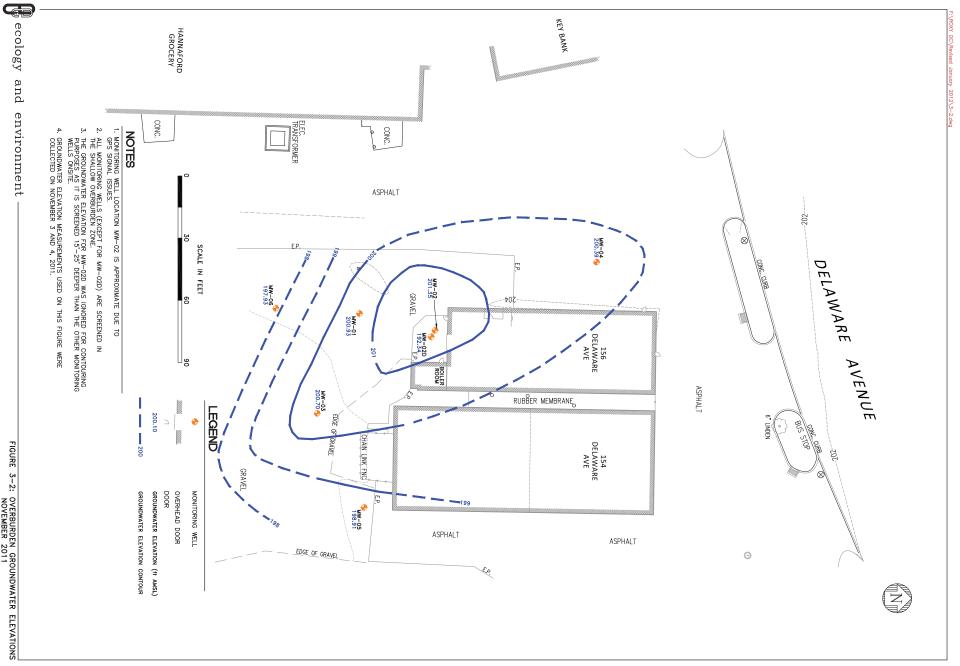


FIGURE 3-1: OVERBURDEN GROUNDWATER ELEVATIONS
JUNE 2011
FORMER ROXY CLEANERS





# APPENDIX A OWNER CERTIFICATION



## Enclosure 2 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form



Site Details Box 1 Site No. 401058 Site Name Former Roxy Cleaners Site Address: 156 Delaware Avenue Zip Code: 12054 City/Town: Delmar County: Albany Site Acreage: 1.100 Reporting Period: January 16, 2018 to January 16, 2021 YES NO 1. Is the information above correct? If NO, include handwritten above or on a separate sheet. 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? 4. 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. Is the site currently undergoing development? Box 2 YES NO 6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial 7. Are all ICs in place and functioning as designed? IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue. A Corrective Measures Work Plan must be submitted along with this form to address these issues. Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 401058 Box 3

#### **Description of Institutional Controls**

Parcel

Owner

Institutional Control

86.10-02-01

A Lot in Delmar

Ground Water Use Restriction Soil Management Plan Landuse Restriction Site Management Plan IC/EC Plan

A series of ICs are required to implement, maintain and monitor the ECs. The Environmental Easement (EE) requires compliance with the ICs. The EE for this site was recorded on 07/27/16 in Albany County as instrument #R2016-16680.

The EE ensures that:

- · All ECs must be operated and maintained as specified in the SMP
- All ECs on the Site must be inspected and certified at a frequency and in a manner defined in the SMP
- · Environmental monitoring must be performed as defined in the SMP
- Data and information pertinent to SM for the Controlled Property must be reported at the frequency and in a manner defined in the SMP
- On-site environmental monitoring devices, including but not limited to groundwater monitoring wells, must be protected and replaced as necessary to ensure continued functioning in the manner specified in the SMP.

In addition, the Environmental Easement places the following restrictions on the property:

- Required compliance with the approved SMP. Restrict the use of groundwater as a source
  of potable water, without necessary water quality treatment as determined by the New
  York State Department of Health (NYSDOH) and/or the NYSDEC
- The owner of the Property shall provide information to the NYSDEC to assist it in carrying
  out its obligation to provide a periodic certification, prepared and submitted by a
  professional engineer or environmental professional acceptable to the NYSDEC or
  Relevant Agency, which will certify that the IC/ECs put in place are unchanged from the
  previous certification, comply with the SMP, and have not been impaired
- The owner of the Property shall continue in full force and effect any IC/ECs required for the Remedy and shall not, through any act or omission, interfere with the NYSDEC's maintenance and monitoring of such controls, unless the owner first obtains permission to discontinue such controls from the NYSDEC or Relevant Agency, in compliance with the approved SMP subject to modifications as approved by the NYSDEC or Relevant Agency

· Limit the use and development of the property to the commercial/industrial use.

Box 4

#### **Description of Engineering Controls**

Parcel

**Engineering Control** 

86.10-02-01

Vapor Mitigation

**Engineering Controls:** 

- \* Sub-slab depressurization system required to be installed and managed within future onsite structure.
- \* Continued SSDS operation and management of SSDS at 154 Delaware Avenue.
- \* provision to evaluate the potential for vapor intrusion for any buildings developed on the site, including provision for mitigation of any impacts identified;
- \* provision to evaluate the potential for soil vapor intrusion for existing buildings if building use changes significantly or if a vacant building become occupied.
- \* monitoring of groundwater, soil vapor, and indoor air to assess the performance and effectiveness of the remedy:
- \* maintaining site access controls and Department notification

#### 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 Engineering Control certification;
  - b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES NO

- For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:
  - (a) The 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) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
  - (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
  - (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

X

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

# APPENDIX B ENGINEER CERTIFICATION

#### IC CERTIFICATIONS SITE NO. 401058

Box 6

#### SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 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.

print name print business address

am certifying as designated representative (Owner or Reme

\_\_(Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party of Designated Representative

Rendering Certification

#### **EC CERTIFICATIONS**

Box 7

#### **Professional Engineer Signature**

I certify that all information in Boxes 4 and 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.

print name at HENNESS ENGINEERS

print business address

am certifying as a Professional Engineer for the Avritous

WITHOUT DE INDMASIS

(Owner or Remedial Party)

Signature of Professional Engineer, for the Owner or

Remedial Party, Rendering Certification

Stamp (Required for PE)

Date

## **Appendix C**

## **Well Data Sheets**

Tel #: 518-885-4399 Fax #: 518-885-4416

**Well Gauging Data Sheet** 

Project: Former Roxy Cleaners	Date: 4/-/9 -/9
Location: 156 Delaware Ave Delmor	
Personnel: A. Shi poee	Field Conditions: 55° / month / Mandas (up. 1)

16	Well ID	DTP	DTW	DTB	Purge Amount	Remarks	(color, odor, well conditions, roadbox conditions, etc.)
	MW-4 MW-61		2.75'	21.65	10go	brown mus	ddy no odor (peri) 1, no odor (peri)
ł	110		2.401	17.99	Sgal	mirker	1 no odor (peri)
	MW-02 DR		8,60	11,60	JAD ORL	murky	no odor
ł	MWEGIR		.5	23,40	13.3d	cloudy	, no odor
ŀ	MW-03		h.	21,8'	Igal	ļ	
	MW-05		2.6	21.65	Agal Egal 10 gal	0 -1	
ł	MW-06		1.82	21.30'	10 gal	cloudy	moodor reddish (bailor)
$\vdash$						V <sub>II</sub>	
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Purge Amount = DTB-DTW\*ConversionFactor\*3 Conversion Factors: 1" Well = 0.04 gal/ft 2" Well = 0.17 gal/ft 3" Well = 0.37 gal/ft 4" Well = 0.66 gal/ft 6" Well = 1.47 gal/ft



Precision Environmental Services, Inc. 831 Rt. 67, Lot 38 Ballston Spa, NY 12020 Tel#: 518-885-4399

Fax #: 518-885-4416

### Well Gauging Data Sheet

^ ^		-
Project: forms Krzy chemis	Date: 4-14-20.	
Location: Dolmar NY	Project No.:	
Personnel: Mile	Field Conditions: Som 50's	

Well ID	DTP	DTW	DTB	Purge Amount	Remarks	(color, odor, well conditions, roadbox conditions, etc.)
MW-1		2.46	19,45	8	ho od	3/5
MW-2DR		8.45	47.65	16gds	No od	214
MN-2R		Ø.50'	23.50	9'	Wahr was	+ dipression duly progra
MW-3		1.95	22.25	9	woods	7
Mw-4		2.96	22.25	9	NO 00	1265
MW-5		2.95	23.70	3	Nos	dars
MW-6		2.50'	21.30	9	No a	7012·
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### APPENDIX D

**Laboratory Results** 



#### ANALYTICAL REPORT

Lab Number: L2101359

Client: Hennessy Engineering & Consulting

PO Box 118

Voorheesville, NY 12186

ATTN: William Hennessy Phone: (518) 475-1670

Project Name: DELMAR 156 DELAWARE

Project Number: Not Specified Report Date: 01/14/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



**Project Name:** DELMAR 156 DELAWARE

Project Number: Not Specified

Lab Number:

L2101359

Report Date:

01/14/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2101359-01	MW-1	WATER	DELMAR 156 DELAWARE	01/11/21 11:00	01/11/21



L2101359

Project Name: DELMAR 156 DELAWARE Lab Number:

Project Number: Not Specified Report Date: 01/14/21

#### **Case Narrative**

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.	



Project Name: DELMAR 156 DELAWARE Lab Number: L2101359

Project Number: Not Specified Report Date: 01/14/21

#### **Case Narrative (continued)**

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Title: Technical Director/Representative Date: 01/14/21

Jufani Morrissey-Tiffani Morrissey

## **ORGANICS**



### **VOLATILES**



Project Name: DELMAR 156 DELAWARE Lab Number: L2101359

Project Number: Not Specified Report Date: 01/14/21

SAMPLE RESULTS

Lab ID: L2101359-01 D2 Date Collected: 01/11/21 11:00

Client ID: Date Received: 01/11/21

Sample Location: DELMAR 156 DELAWARE Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/14/21 03:25

Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes		Quanter	Office	I I	MIDE	Diddon'i actor
Tetrachloroethene	7600		ug/l	50	18.	100
Surrogate			% Recovery	Qualifier		eptance riteria
1,2-Dichloroethane-d4			97			70-130
Toluene-d8			96			70-130
4-Bromofluorobenzene			103			70-130
Dibromofluoromethane			100			70-130



L2101359

**Project Name:** Lab Number: **DELMAR 156 DELAWARE** 

**Project Number:** Report Date: Not Specified

01/14/21

**SAMPLE RESULTS** 

Lab ID: L2101359-01 D Date Collected: 01/11/21 11:00

Client ID: Date Received: 01/11/21 MW-1

Sample Location: Field Prep: Not Specified **DELMAR 156 DELAWARE** 

Sample Depth:

Matrix: Water Analytical Method: 1,8260C Analytical Date: 01/13/21 12:52

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor		
Volatile Organics by GC/MS - Westborou	Volatile Organics by GC/MS - Westborough Lab							
Methylene chloride	ND		ug/l	62	18.	25		
1,1-Dichloroethane	ND		ug/l	62	18.	25		
Chloroform	ND		ug/l	62	18.	25		
Carbon tetrachloride	ND		ug/l	12	3.4	25		
1,2-Dichloropropane	ND		ug/l	25	3.4	25		
Dibromochloromethane	ND		ug/l	12	3.7	25		
1,1,2-Trichloroethane	ND		ug/l	38	12.	25		
Tetrachloroethene	9000	Е	ug/l	12	4.5	25		
Chlorobenzene	ND		ug/l	62	18.	25		
Trichlorofluoromethane	ND		ug/l	62	18.	25		
1,2-Dichloroethane	ND		ug/l	12	3.3	25		
1,1,1-Trichloroethane	ND		ug/l	62	18.	25		
Bromodichloromethane	ND		ug/l	12	4.8	25		
trans-1,3-Dichloropropene	ND		ug/l	12	4.1	25		
cis-1,3-Dichloropropene	ND		ug/l	12	3.6	25		
Bromoform	ND		ug/l	50	16.	25		
1,1,2,2-Tetrachloroethane	ND		ug/l	12	4.2	25		
Benzene	ND		ug/l	12	4.0	25		
Toluene	ND		ug/l	62	18.	25		
Ethylbenzene	ND		ug/l	62	18.	25		
Chloromethane	ND		ug/l	62	18.	25		
Bromomethane	ND		ug/l	62	18.	25		
Vinyl chloride	500		ug/l	25	1.8	25		
Chloroethane	ND		ug/l	62	18.	25		
1,1-Dichloroethene	4.6	J	ug/l	12	4.2	25		
trans-1,2-Dichloroethene	240		ug/l	62	18.	25		
Trichloroethene	3300		ug/l	12	4.4	25		
1,2-Dichlorobenzene	ND		ug/l	62	18.	25		



Project Name: DELMAR 156 DELAWARE Lab Number: L2101359

Project Number: Not Specified Report Date: 01/14/21

**SAMPLE RESULTS** 

Lab ID: L2101359-01 D Date Collected: 01/11/21 11:00

Client ID: MW-1 Date Received: 01/11/21
Sample Location: DELMAR 156 DELAWARE Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westborough Lab							
1,3-Dichlorobenzene	ND		ug/l	62	18.	25	
1,4-Dichlorobenzene	ND		ug/l	62	18.	25	
Methyl tert butyl ether	ND		ug/l	62	18.	25	
p/m-Xylene	ND		ug/l	62	18.	25	
o-Xylene	ND		ug/l	62	18.	25	
cis-1,2-Dichloroethene	3800		ug/l	62	18.	25	
Styrene	ND		ug/l	62	18.	25	
Dichlorodifluoromethane	ND		ug/l	120	25.	25	
Acetone	58	J	ug/l	120	36.	25	
Carbon disulfide	ND		ug/l	120	25.	25	
2-Butanone	ND		ug/l	120	48.	25	
4-Methyl-2-pentanone	ND		ug/l	120	25.	25	
2-Hexanone	ND		ug/l	120	25.	25	
Bromochloromethane	ND		ug/l	62	18.	25	
1,2-Dibromoethane	ND		ug/l	50	16.	25	
1,2-Dibromo-3-chloropropane	ND		ug/l	62	18.	25	
Isopropylbenzene	ND		ug/l	62	18.	25	
1,2,3-Trichlorobenzene	ND		ug/l	62	18.	25	
1,2,4-Trichlorobenzene	ND		ug/l	62	18.	25	
Methyl Acetate	ND		ug/l	50	5.8	25	
Cyclohexane	ND		ug/l	250	6.8	25	
1,4-Dioxane	ND		ug/l	6200	1500	25	
Freon-113	ND		ug/l	62	18.	25	
Methyl cyclohexane	ND		ug/l	250	9.9	25	

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	109	70-130	
Toluene-d8	102	70-130	
4-Bromofluorobenzene	105	70-130	
Dibromofluoromethane	105	70-130	



Project Number: Not Specified Report Date: 01/14/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/13/21 08:58

Analyst: PD

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS	- Westborough Lab	o for sample(s):	01 Batch:	WG1454763-5
Methylene chloride	ND	ug/l	2.5	0.70
1,1-Dichloroethane	ND	ug/l	2.5	0.70
Chloroform	ND	ug/l	2.5	0.70
Carbon tetrachloride	ND	ug/l	0.50	0.13
1,2-Dichloropropane	ND	ug/l	1.0	0.14
Dibromochloromethane	ND	ug/l	0.50	0.15
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50
Tetrachloroethene	ND	ug/l	0.50	0.18
Chlorobenzene	ND	ug/l	2.5	0.70
Trichlorofluoromethane	ND	ug/l	2.5	0.70
1,2-Dichloroethane	ND	ug/l	0.50	0.13
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70
Bromodichloromethane	ND	ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14
Bromoform	ND	ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17
Benzene	ND	ug/l	0.50	0.16
Toluene	ND	ug/l	2.5	0.70
Ethylbenzene	ND	ug/l	2.5	0.70
Chloromethane	ND	ug/l	2.5	0.70
Bromomethane	ND	ug/l	2.5	0.70
Vinyl chloride	ND	ug/l	1.0	0.07
Chloroethane	ND	ug/l	2.5	0.70
1,1-Dichloroethene	ND	ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70
Trichloroethene	ND	ug/l	0.50	0.18
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70



Project Number: Not Specified Report Date: 01/14/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/13/21 08:58

Analyst: PD

Parameter	Result	Qualifier Units	s RL	MDL
olatile Organics by GC/MS - V	Vestborough Lab	for sample(s):	01 Batch:	WG1454763-5
1,4-Dichlorobenzene	ND	ug/l	2.5	0.70
Methyl tert butyl ether	ND	ug/l	2.5	0.70
p/m-Xylene	ND	ug/l	2.5	0.70
o-Xylene	ND	ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND	ug/l	2.5	0.70
Styrene	ND	ug/l	2.5	0.70
Dichlorodifluoromethane	ND	ug/l	5.0	1.0
Acetone	ND	ug/l	5.0	1.5
Carbon disulfide	ND	ug/l	5.0	1.0
2-Butanone	ND	ug/l	5.0	1.9
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0
2-Hexanone	ND	ug/l	5.0	1.0
Bromochloromethane	ND	ug/l	2.5	0.70
1,2-Dibromoethane	ND	ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70
Isopropylbenzene	ND	ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND	ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND	ug/l	2.5	0.70
Methyl Acetate	ND	ug/l	2.0	0.23
Cyclohexane	ND	ug/l	10	0.27
1,4-Dioxane	ND	ug/l	250	61.
Freon-113	ND	ug/l	2.5	0.70
Methyl cyclohexane	ND	ug/l	10	0.40



Project Number: Not Specified Report Date: 01/14/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/13/21 08:58

Analyst: PD

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1454763-5

		Acceptance		
Surrogate	%Recovery Q	ualifier Criteria		
1,2-Dichloroethane-d4	108	70-130		
Toluene-d8	102	70-130		
4-Bromofluorobenzene	104	70-130		
Dibromofluoromethane	104	70-130		



Project Number: Not Specified Report Date: 01/14/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/13/21 19:44

Analyst: AJK

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	01 Batch:	WG1454967-5
Methylene chloride	ND	ug/l	2.5	0.70
1,1-Dichloroethane	ND	ug/l	2.5	0.70
Chloroform	ND	ug/l	2.5	0.70
Carbon tetrachloride	ND	ug/l	0.50	0.13
1,2-Dichloropropane	ND	ug/l	1.0	0.14
Dibromochloromethane	ND	ug/l	0.50	0.15
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50
Tetrachloroethene	ND	ug/l	0.50	0.18
Chlorobenzene	ND	ug/l	2.5	0.70
Trichlorofluoromethane	ND	ug/l	2.5	0.70
1,2-Dichloroethane	ND	ug/l	0.50	0.13
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70
Bromodichloromethane	ND	ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14
Bromoform	ND	ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17
Benzene	ND	ug/l	0.50	0.16
Toluene	ND	ug/l	2.5	0.70
Ethylbenzene	ND	ug/l	2.5	0.70
Chloromethane	ND	ug/l	2.5	0.70
Bromomethane	ND	ug/l	2.5	0.70
Vinyl chloride	ND	ug/l	1.0	0.07
Chloroethane	ND	ug/l	2.5	0.70
1,1-Dichloroethene	ND	ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70
Trichloroethene	ND	ug/l	0.50	0.18
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70



Project Number: Not Specified Report Date: 01/14/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/13/21 19:44

Analyst: AJK

Parameter	Result	Qualifier Units	RL	MDL
Volatile Organics by GC/MS - Westb	orough Lab	for sample(s): 01	Batch:	WG1454967-5
1,4-Dichlorobenzene	ND	ug/l	2.5	0.70
Methyl tert butyl ether	ND	ug/l	2.5	0.70
p/m-Xylene	ND	ug/l	2.5	0.70
o-Xylene	ND	ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND	ug/l	2.5	0.70
Styrene	ND	ug/l	2.5	0.70
Dichlorodifluoromethane	ND	ug/l	5.0	1.0
Acetone	ND	ug/l	5.0	1.5
Carbon disulfide	ND	ug/l	5.0	1.0
2-Butanone	ND	ug/l	5.0	1.9
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0
2-Hexanone	ND	ug/l	5.0	1.0
Bromochloromethane	ND	ug/l	2.5	0.70
1,2-Dibromoethane	ND	ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70
Isopropylbenzene	ND	ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND	ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND	ug/l	2.5	0.70
Methyl Acetate	ND	ug/l	2.0	0.23
Cyclohexane	ND	ug/l	10	0.27
1,4-Dioxane	ND	ug/l	250	61.
Freon-113	ND	ug/l	2.5	0.70
Methyl cyclohexane	ND	ug/l	10	0.40



Project Number: Not Specified Report Date: 01/14/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/13/21 19:44

Analyst: AJK

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1454967-5

			Acceptance
Surrogate	%Recovery	Qualifier	Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130



**Project Name:** DELMAR 156 DELAWARE

Project Number: Not Specified

Lab Number: L2101359

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
Volatile Organics by GC/MS - Westborough	Lab Associated	sample(s): 0	1 Batch: WG1	454763-3	WG1454763-4		
Methylene chloride	100		100		70-130	0	20
1,1-Dichloroethane	120		120		70-130	0	20
Chloroform	110		110		70-130	0	20
Carbon tetrachloride	110		110		63-132	0	20
1,2-Dichloropropane	120		120		70-130	0	20
Dibromochloromethane	100		110		63-130	10	20
1,1,2-Trichloroethane	110		110		70-130	0	20
Tetrachloroethene	100		100		70-130	0	20
Chlorobenzene	110		110		75-130	0	20
Trichlorofluoromethane	110		120		62-150	9	20
1,2-Dichloroethane	110		120		70-130	9	20
1,1,1-Trichloroethane	110		110		67-130	0	20
Bromodichloromethane	110		110		67-130	0	20
trans-1,3-Dichloropropene	100		100		70-130	0	20
cis-1,3-Dichloropropene	110		110		70-130	0	20
Bromoform	99		100		54-136	1	20
1,1,2,2-Tetrachloroethane	100		110		67-130	10	20
Benzene	110		120		70-130	9	20
Toluene	110		110		70-130	0	20
Ethylbenzene	110		110		70-130	0	20
Chloromethane	110		120		64-130	9	20
Bromomethane	73		68		39-139	7	20
Vinyl chloride	120		120		55-140	0	20



**Project Name:** DELMAR 156 DELAWARE

Project Number: Not Specified

Lab Number: L2101359

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits	
olatile Organics by GC/MS - Westboro	ough Lab Associated	sample(s): 0	1 Batch: WG	1454763-3	WG1454763-4			
Chloroethane	130		130		55-138	0	20	
1,1-Dichloroethene	110		110		61-145	0	20	
trans-1,2-Dichloroethene	110		120		70-130	9	20	
Trichloroethene	110		110		70-130	0	20	
1,2-Dichlorobenzene	110		110		70-130	0	20	
1,3-Dichlorobenzene	110		110		70-130	0	20	
1,4-Dichlorobenzene	110		110		70-130	0	20	
Methyl tert butyl ether	100		110		63-130	10	20	
p/m-Xylene	110		110		70-130	0	20	
o-Xylene	110		110		70-130	0	20	
cis-1,2-Dichloroethene	110		110		70-130	0	20	
Styrene	110		110		70-130	0	20	
Dichlorodifluoromethane	100		100		36-147	0	20	
Acetone	100		110		58-148	10	20	
Carbon disulfide	93		95		51-130	2	20	
2-Butanone	100		120		63-138	18	20	
4-Methyl-2-pentanone	99		110		59-130	11	20	
2-Hexanone	97		110		57-130	13	20	
Bromochloromethane	120		120		70-130	0	20	
1,2-Dibromoethane	100		110		70-130	10	20	
1,2-Dibromo-3-chloropropane	85		100		41-144	16	20	
Isopropylbenzene	110		110		70-130	0	20	
1,2,3-Trichlorobenzene	81		90		70-130	11	20	



**Project Name:** DELMAR 156 DELAWARE

Project Number: Not Specified

Lab Number: L2101359

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s): 01	Batch: WG	1454763-3	WG1454763-4				
1,2,4-Trichlorobenzene	91		96		70-130	5		20	
Methyl Acetate	110		120		70-130	9		20	
Cyclohexane	120		120		70-130	0		20	
1,4-Dioxane	92		100		56-162	8		20	
Freon-113	110		110		70-130	0		20	
Methyl cyclohexane	110		110		70-130	0		20	

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108	113	70-130
Toluene-d8	104	105	70-130
4-Bromofluorobenzene	105	105	70-130
Dibromofluoromethane	105	105	70-130

**Project Name:** DELMAR 156 DELAWARE

Project Number: Not Specified

Lab Number: L2101359

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
/olatile Organics by GC/MS - Westborough	Lab Associated	sample(s): 01	Batch: WG1	454967-3	WG1454967-4		
Methylene chloride	110		100		70-130	10	20
1,1-Dichloroethane	110		110		70-130	0	20
Chloroform	110		110		70-130	0	20
Carbon tetrachloride	99		99		63-132	0	20
1,2-Dichloropropane	110		110		70-130	0	20
Dibromochloromethane	96		100		63-130	4	20
1,1,2-Trichloroethane	97		100		70-130	3	20
Tetrachloroethene	100		100		70-130	0	20
Chlorobenzene	100		100		75-130	0	20
Trichlorofluoromethane	100		100		62-150	0	20
1,2-Dichloroethane	100		100		70-130	0	20
1,1,1-Trichloroethane	110		110		67-130	0	20
Bromodichloromethane	100		100		67-130	0	20
trans-1,3-Dichloropropene	97		99		70-130	2	20
cis-1,3-Dichloropropene	100		100		70-130	0	20
Bromoform	89		93		54-136	4	20
1,1,2,2-Tetrachloroethane	92		100		67-130	8	20
Benzene	110		110		70-130	0	20
Toluene	100		100		70-130	0	20
Ethylbenzene	100		100		70-130	0	20
Chloromethane	110		100		64-130	10	20
Bromomethane	96		100		39-139	4	20
Vinyl chloride	100		100		55-140	0	20



**Project Name:** DELMAR 156 DELAWARE

Project Number: Not Specified

Lab Number: L2101359

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough	Lab Associated	sample(s): 0	1 Batch: WG1	454967-3	WG1454967-4			
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	100		110		61-145	10		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	110		110		70-130	0		20
1,2-Dichlorobenzene	94		98		70-130	4		20
1,3-Dichlorobenzene	96		98		70-130	2		20
1,4-Dichlorobenzene	96		97		70-130	1		20
Methyl tert butyl ether	98		100		63-130	2		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	95		93		36-147	2		20
Acetone	120		91		58-148	27	Q	20
Carbon disulfide	110		100		51-130	10		20
2-Butanone	96		100		63-138	4		20
4-Methyl-2-pentanone	80		92		59-130	14		20
2-Hexanone	82		93		57-130	13		20
Bromochloromethane	110		110		70-130	0		20
1,2-Dibromoethane	95		99		70-130	4		20
1,2-Dibromo-3-chloropropane	74		85		41-144	14		20
Isopropylbenzene	100		100		70-130	0		20
1,2,3-Trichlorobenzene	76		99		70-130	26	Q	20



**Project Name:** DELMAR 156 DELAWARE

Project Number: Not Specified

Lab Number: L2101359

Parameter	LCS %Recovery	Qual	LCSD %Recovery	/ Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by GC/MS - Westborough L	ab Associated s	sample(s): 01	Batch: W	/G1454967-3	WG1454967-4				
1,2,4-Trichlorobenzene	83		97		70-130	16		20	
Methyl Acetate	100		110		70-130	10		20	
Cyclohexane	110		110		70-130	0		20	
1,4-Dioxane	92		106		56-162	14		20	
Freon-113	110		110		70-130	0		20	
Methyl cyclohexane	110		110		70-130	0		20	

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94	97	70-130
Toluene-d8	97	98	70-130
4-Bromofluorobenzene	102	104	70-130
Dibromofluoromethane	101	100	70-130

**Lab Number:** L2101359

**Report Date:** 01/14/21

Project Name: DELMAR 156 DELAWARE

Project Number: Not Specified

### Sample Receipt and Container Information

Were project specific reporting limits specified?

**Cooler Information** 

Cooler Custody Seal

A Absent

Container Information			Initial	itial Final				Frozen	
Container ID	Container Type	Cooler	рН	рН рН с		Pres	Seal	Date/Time	Analysis(*)
L2101359-01A	Vial HCl preserved	Α	NA		3.4	Υ	Absent		NYTCL-8260-R2(14)
L2101359-01B	Vial HCl preserved	Α	NA		3.4	Υ	Absent		NYTCL-8260-R2(14)
L2101359-01C	Vial HCl preserved	Α	NA		3.4	Υ	Absent		NYTCL-8260-R2(14)



Project Name:DELMAR 156 DELAWARELab Number:L2101359Project Number:Not SpecifiedReport Date:01/14/21

#### **GLOSSARY**

#### **Acronyms**

**EDL** 

LOD

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable (DoD report formats only)

from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

 Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case

estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content,

where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any

adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated

using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile

Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less

than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the

values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF

and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name:DELMAR 156 DELAWARELab Number:L2101359Project Number:Not SpecifiedReport Date:01/14/21

#### **Footnotes**

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### **Terms**

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a "Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A -Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name:DELMAR 156 DELAWARELab Number:L2101359Project Number:Not SpecifiedReport Date:01/14/21

#### **Data Qualifiers**

- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name:DELMAR 156 DELAWARELab Number:L2101359Project Number:Not SpecifiedReport Date:01/14/21

#### REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

#### **LIMITATION OF LIABILITIES**

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

Revision 17

Published Date: 4/28/2020 9:42:21 AM

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ID No.:17873

#### Certification Information

#### The following analytes are not included in our Primary NELAP Scope of Accreditation:

#### Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

**SM4500**: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

### **Mansfield Facility**

**SM 2540D:** TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

EPA TO-12 Non-methane organics

EPA 3C Fixed gases

Biological Tissue Matrix: EPA 3050B

#### The following analytes are included in our Massachusetts DEP Scope of Accreditation

#### Westborough Facility:

#### **Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE,

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

#### Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. **EPA 624.1**: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

#### Mansfield Facility:

#### **Drinking Water**

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

#### Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Pre-Qualtrax Document ID: 08-113 Document Type: Form

Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193  Client Information Client: Homes	/	Project Location: Project # (Use Project name as P	Way poper Ave, Suite 1	30 7 50		ge of Clouvere	Delive	in Lab rables ASP-A EQUIS (1 F	File)	_ E	R 121 ASP-B EQuIS (4 File	ALPHA Job #  L 2 10 1359  Billing Information  Same as Client Info P0 #  Disposal Site Information
Phone: 5/8 3/Fax: Email: 5/1/6/16/17 These samples have be	2 186 3 3597 emper. com			Due Date # of Days		ka sa sa		IY TOGS WQ Standa IY Restricte IY Unrestric IYC Sewer I YSIS	d Use ted Use		Y Part 375 Y CP-51 Wher	Please identify below location of applicable disposal facilities.  Disposal Facility:  NJ NY  Other:  Sample Filtration
Please specify Metals  ALPHA Lab ID (Lab Use Only)	or TAL.	ample ID		ection	Sample Matrix	Sampler's	8200 C					Done Lab to do Preservation Lab to do  (Please Specify below)
0/359 - 01	E	NW-1	Date,	time tioo	AQ	7UH	X					Sample Specific Comments e
B = HCI C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle	Westboro: Certification Mansfield: Certification Mansfield: Relinguished	No: MA015	j gate/ 1/1/2-1 j-/l-21	F	Preservative	B Receive	d By:	L	1-11-	Date/Time 21/5/3	Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)



#### ANALYTICAL REPORT

Lab Number: L2100343

Client: Hennessy Engineering & Consulting

PO Box 118

Voorheesville, NY 12186

ATTN: William Hennessy
Phone: (518) 475-1670
Project Name: FORMER ROXY

Project Number: Not Specified

Report Date: 01/08/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019 508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: FORMER ROXY
Project Number: Not Specified

 Lab Number:
 L2100343

 Report Date:
 01/08/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2100343-01	MW-4	WATER	DELMAR	12/30/20 14:00	01/05/21
L2100343-02	MW-5	WATER	DELMAR	12/30/20 16:20	01/05/21
L2100343-03	MW-6	WATER	DELMAR	12/30/20 15:30	01/05/21
L2100343-04	MW-3	WATER	DELMAR	12/30/20 16:00	01/05/21
L2100343-05	MW-2DR	WATER	DELMAR	12/30/20 14:30	01/05/21
L2100343-06	MW-2R	WATER	DELMAR	12/30/20 15:00	01/05/21
L2100343-07	TRIP BLANK	WATER	DELMAR	12/30/20 00:00	01/05/21



Project Name:FORMER ROXYLab Number:L2100343Project Number:Not SpecifiedReport Date:01/08/21

#### **Case Narrative**

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.	



Serial\_No:01082118:08

Project Name:FORMER ROXYLab Number:L2100343Project Number:Not SpecifiedReport Date:01/08/21

#### **Case Narrative (continued)**

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

L2100343-07: A sample identified as "TRIP BLANK" was received, but not listed on the Chain of Custody. This sample was not analyzed.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

While UK. Marris Michelle M. Morris

Authorized Signature:

Title: Technical Director/Representative Date: 01/08/21

## **ORGANICS**



### **VOLATILES**



L2100343

12/30/20 14:00

**Project Name:** FORMER ROXY

**Project Number:** Not Specified

**SAMPLE RESULTS** 

Report Date: 01/08/21

Lab Number:

Date Collected:

Lab ID: L2100343-01

Client ID: MW-4 Sample Location: **DELMAR**  Date Received: 01/05/21 Field Prep: Not Specified

Sample Depth:

Matrix: Water Analytical Method: 1,8260C Analytical Date: 01/08/21 00:06

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westl	oorough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1	
Chloroform	ND		ug/l	2.5	0.70	1	
Carbon tetrachloride	ND		ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1	
Dibromochloromethane	ND		ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1	
Tetrachloroethene	ND		ug/l	0.50	0.18	1	
Chlorobenzene	ND		ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1	
Bromodichloromethane	ND		ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1	
Bromoform	ND		ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1	
Benzene	ND		ug/l	0.50	0.16	1	
Toluene	ND		ug/l	2.5	0.70	1	
Ethylbenzene	ND		ug/l	2.5	0.70	1	
Chloromethane	ND		ug/l	2.5	0.70	1	
Bromomethane	ND		ug/l	2.5	0.70	1	
Vinyl chloride	0.16	J	ug/l	1.0	0.07	1	
Chloroethane	ND		ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1	
Trichloroethene	ND		ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1	



Project Name: FORMER ROXY Lab Number: L2100343

Project Number: Not Specified Report Date: 01/08/21

**SAMPLE RESULTS** 

Lab ID: L2100343-01 Date Collected: 12/30/20 14:00

Client ID: MW-4 Date Received: 01/05/21 Sample Location: DELMAR Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborou	gh Lab					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	0.79	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	102	70-130	
Toluene-d8	94	70-130	
4-Bromofluorobenzene	100	70-130	
Dibromofluoromethane	100	70-130	



L2100343

01/08/21

Project Name: FORMER ROXY

L2100343-02

MW-5

DELMAR

Project Number: Not Specified

**SAMPLE RESULTS** 

Date Collected: 12/30/20 16:20

Lab Number:

Report Date:

Date Received: 01/05/21
Field Prep: Not Specified

Sample Depth:

Sample Location:

Lab ID:

Client ID:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/07/21 12:12

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborou	gh Lab					
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	0.53		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	11		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	0.84	J	ug/l	2.5	0.70	1
Trichloroethene	0.92		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: FORMER ROXY Lab Number: L2100343

Project Number: Not Specified Report Date: 01/08/21

**SAMPLE RESULTS** 

Lab ID: L2100343-02 Date Collected: 12/30/20 16:20

Client ID: MW-5 Date Received: 01/05/21 Sample Location: DELMAR Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westboroug	h Lab					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	34		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.6	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	104	70-130	
Toluene-d8	106	70-130	
4-Bromofluorobenzene	108	70-130	
Dibromofluoromethane	103	70-130	



**Project Name:** FORMER ROXY Lab Number: L2100343

Project Number: Not Specified Report Date: 01/08/21

**SAMPLE RESULTS** 

Lab ID: L2100343-03 Date Collected: 12/30/20 15:30

Client ID: MW-6 Date Received: 01/05/21 Sample Location: DELMAR Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/07/21 12:35

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Wes	stborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1	
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1	
Chloroform	ND		ug/l	2.5	0.70	1	
Carbon tetrachloride	ND		ug/l	0.50	0.13	1	
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1	
Dibromochloromethane	ND		ug/l	0.50	0.15	1	
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1	
Tetrachloroethene	ND		ug/l	0.50	0.18	1	
Chlorobenzene	ND		ug/l	2.5	0.70	1	
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1	
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1	
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1	
Bromodichloromethane	ND		ug/l	0.50	0.19	1	
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1	
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1	
Bromoform	ND		ug/l	2.0	0.65	1	
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1	
Benzene	ND		ug/l	0.50	0.16	1	
Toluene	ND		ug/l	2.5	0.70	1	
Ethylbenzene	ND		ug/l	2.5	0.70	1	
Chloromethane	ND		ug/l	2.5	0.70	1	
Bromomethane	ND		ug/l	2.5	0.70	1	
Vinyl chloride	0.52	J	ug/l	1.0	0.07	1	
Chloroethane	ND		ug/l	2.5	0.70	1	
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1	
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1	
Trichloroethene	0.26	J	ug/l	0.50	0.18	1	
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1	



Project Name: FORMER ROXY Lab Number: L2100343

Project Number: Not Specified Report Date: 01/08/21

**SAMPLE RESULTS** 

Lab ID: L2100343-03 Date Collected: 12/30/20 15:30

Client ID: MW-6 Date Received: 01/05/21 Sample Location: DELMAR Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westboroug	gh Lab					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	20		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	104		70-130	
Toluene-d8	105		70-130	
4-Bromofluorobenzene	106		70-130	
Dibromofluoromethane	103		70-130	



Project Name: FORMER ROXY Lab Number: L2100343

Project Number: Not Specified Report Date: 01/08/21

**SAMPLE RESULTS** 

Lab ID: L2100343-04 D Date Collected: 12/30/20 16:00

Client ID: MW-3 Date Received: 01/05/21 Sample Location: DELMAR Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/07/21 12:59

Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Volatile Organics by GC/MS - Westb	oorough Lab						
Methylene chloride	ND		ug/l	12	3.5	5	
1,1-Dichloroethane	ND		ug/l	12	3.5	5	
Chloroform	ND		ug/l	12	3.5	5	
Carbon tetrachloride	ND		ug/l	2.5	0.67	5	
1,2-Dichloropropane	ND		ug/l	5.0	0.68	5	
Dibromochloromethane	ND		ug/l	2.5	0.74	5	
1,1,2-Trichloroethane	ND		ug/l	7.5	2.5	5	
Tetrachloroethene	130		ug/l	2.5	0.90	5	
Chlorobenzene	ND		ug/l	12	3.5	5	
Trichlorofluoromethane	ND		ug/l	12	3.5	5	
1,2-Dichloroethane	ND		ug/l	2.5	0.66	5	
1,1,1-Trichloroethane	ND		ug/l	12	3.5	5	
Bromodichloromethane	ND		ug/l	2.5	0.96	5	
trans-1,3-Dichloropropene	ND		ug/l	2.5	0.82	5	
cis-1,3-Dichloropropene	ND		ug/l	2.5	0.72	5	
Bromoform	ND		ug/l	10	3.2	5	
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	0.84	5	
Benzene	ND		ug/l	2.5	0.80	5	
Toluene	ND		ug/l	12	3.5	5	
Ethylbenzene	ND		ug/l	12	3.5	5	
Chloromethane	ND		ug/l	12	3.5	5	
Bromomethane	ND		ug/l	12	3.5	5	
Vinyl chloride	170		ug/l	5.0	0.36	5	
Chloroethane	ND		ug/l	12	3.5	5	
1,1-Dichloroethene	2.0	J	ug/l	2.5	0.84	5	
trans-1,2-Dichloroethene	9.7	J	ug/l	12	3.5	5	
Trichloroethene	140		ug/l	2.5	0.88	5	
1,2-Dichlorobenzene	ND		ug/l	12	3.5	5	



Project Name: FORMER ROXY Lab Number: L2100343

Project Number: Not Specified Report Date: 01/08/21

**SAMPLE RESULTS** 

Lab ID: L2100343-04 D Date Collected: 12/30/20 16:00

Client ID: MW-3 Date Received: 01/05/21 Sample Location: DELMAR Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborou	gh Lab					
1,3-Dichlorobenzene	ND		ug/l	12	3.5	5
1,4-Dichlorobenzene	ND		ug/l	12	3.5	5
Methyl tert butyl ether	ND		ug/l	12	3.5	5
p/m-Xylene	ND		ug/l	12	3.5	5
o-Xylene	ND		ug/l	12	3.5	5
cis-1,2-Dichloroethene	890		ug/l	12	3.5	5
Styrene	ND		ug/l	12	3.5	5
Dichlorodifluoromethane	ND		ug/l	25	5.0	5
Acetone	8.3	J	ug/l	25	7.3	5
Carbon disulfide	ND		ug/l	25	5.0	5
2-Butanone	ND		ug/l	25	9.7	5
4-Methyl-2-pentanone	ND		ug/l	25	5.0	5
2-Hexanone	ND		ug/l	25	5.0	5
Bromochloromethane	ND		ug/l	12	3.5	5
1,2-Dibromoethane	ND		ug/l	10	3.2	5
1,2-Dibromo-3-chloropropane	ND		ug/l	12	3.5	5
Isopropylbenzene	ND		ug/l	12	3.5	5
1,2,3-Trichlorobenzene	ND		ug/l	12	3.5	5
1,2,4-Trichlorobenzene	ND		ug/l	12	3.5	5
Methyl Acetate	ND		ug/l	10	1.2	5
Cyclohexane	ND		ug/l	50	1.4	5
1,4-Dioxane	ND		ug/l	1200	300	5
Freon-113	ND		ug/l	12	3.5	5
Methyl cyclohexane	ND		ug/l	50	2.0	5

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	104	70-130	
Toluene-d8	105	70-130	
4-Bromofluorobenzene	108	70-130	
Dibromofluoromethane	104	70-130	



**Project Name:** FORMER ROXY

**Project Number:** Not Specified

**SAMPLE RESULTS** 

Lab Number: L2100343

Report Date: 01/08/21

Lab ID: L2100343-05

Client ID: MW-2DR Sample Location:

Field Prep:

Date Collected:

12/30/20 14:30 01/05/21

DELMAR

Date Received:

Not Specified

Sample Depth:

Matrix: Water

Analytical Method: 1,8260C

Analytical Date:

01/07/21 13:45

Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westb	orough Lab					
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	1.7		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.19	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1



Project Name: FORMER ROXY Lab Number: L2100343

Project Number: Not Specified Report Date: 01/08/21

**SAMPLE RESULTS** 

Lab ID: L2100343-05 Date Collected: 12/30/20 14:30

Client ID: MW-2DR Date Received: 01/05/21 Sample Location: DELMAR Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westboroug	gh Lab					
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	1.7	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	105	70-130	
Toluene-d8	106	70-130	
4-Bromofluorobenzene	108	70-130	
Dibromofluoromethane	103	70-130	



Project Name: FORMER ROXY Lab Number: L2100343

Project Number: Not Specified Report Date: 01/08/21

SAMPLE RESULTS

Lab ID: L2100343-06 D2 Date Collected: 12/30/20 15:00

Client ID: MW-2R Date Received: 01/05/21 Sample Location: DELMAR Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/07/21 20:13

Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough	Lab					
Acetone	420		ug/l	50	15.	10
Surrogate			% Recovery	Qualifier		ptance teria

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	103		70-130



Project Name: FORMER ROXY Lab Number: L2100343

Project Number: Not Specified Report Date: 01/08/21

**SAMPLE RESULTS** 

Lab ID: L2100343-06 D Date Collected: 12/30/20 15:00

Client ID: MW-2R Date Received: 01/05/21 Sample Location: DELMAR Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/07/21 13:22

Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westboro	ugh Lab					
Methylene chloride	ND		ug/l	5.0	1.4	2
1,1-Dichloroethane	ND		ug/l	5.0	1.4	2
Chloroform	ND		ug/l	5.0	1.4	2
Carbon tetrachloride	ND		ug/l	1.0	0.27	2
1,2-Dichloropropane	ND		ug/l	2.0	0.27	2
Dibromochloromethane	ND		ug/l	1.0	0.30	2
1,1,2-Trichloroethane	ND		ug/l	3.0	1.0	2
Tetrachloroethene	ND		ug/l	1.0	0.36	2
Chlorobenzene	ND		ug/l	5.0	1.4	2
Trichlorofluoromethane	ND		ug/l	5.0	1.4	2
1,2-Dichloroethane	ND		ug/l	1.0	0.26	2
1,1,1-Trichloroethane	ND		ug/l	5.0	1.4	2
Bromodichloromethane	ND		ug/l	1.0	0.38	2
trans-1,3-Dichloropropene	ND		ug/l	1.0	0.33	2
cis-1,3-Dichloropropene	ND		ug/l	1.0	0.29	2
Bromoform	ND		ug/l	4.0	1.3	2
1,1,2,2-Tetrachloroethane	ND		ug/l	1.0	0.33	2
Benzene	ND		ug/l	1.0	0.32	2
Toluene	ND		ug/l	5.0	1.4	2
Ethylbenzene	ND		ug/l	5.0	1.4	2
Chloromethane	ND		ug/l	5.0	1.4	2
Bromomethane	ND		ug/l	5.0	1.4	2
Vinyl chloride	ND		ug/l	2.0	0.14	2
Chloroethane	ND		ug/l	5.0	1.4	2
1,1-Dichloroethene	ND		ug/l	1.0	0.34	2
trans-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2
Trichloroethene	ND		ug/l	1.0	0.35	2
1,2-Dichlorobenzene	ND		ug/l	5.0	1.4	2



Project Name: FORMER ROXY Lab Number: L2100343

Project Number: Not Specified Report Date: 01/08/21

**SAMPLE RESULTS** 

Lab ID: L2100343-06 D Date Collected: 12/30/20 15:00

Client ID: MW-2R Date Received: 01/05/21 Sample Location: DELMAR Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborou	gh Lab					
1,3-Dichlorobenzene	ND		ug/l	5.0	1.4	2
1,4-Dichlorobenzene	ND		ug/l	5.0	1.4	2
Methyl tert butyl ether	ND		ug/l	5.0	1.4	2
p/m-Xylene	ND		ug/l	5.0	1.4	2
o-Xylene	ND		ug/l	5.0	1.4	2
cis-1,2-Dichloroethene	ND		ug/l	5.0	1.4	2
Styrene	ND		ug/l	5.0	1.4	2
Dichlorodifluoromethane	ND		ug/l	10	2.0	2
Acetone	430	Е	ug/l	10	2.9	2
Carbon disulfide	ND		ug/l	10	2.0	2
2-Butanone	ND		ug/l	10	3.9	2
4-Methyl-2-pentanone	ND		ug/l	10	2.0	2
2-Hexanone	ND		ug/l	10	2.0	2
Bromochloromethane	ND		ug/l	5.0	1.4	2
1,2-Dibromoethane	ND		ug/l	4.0	1.3	2
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0	1.4	2
Isopropylbenzene	ND		ug/l	5.0	1.4	2
1,2,3-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trichlorobenzene	ND		ug/l	5.0	1.4	2
Methyl Acetate	ND		ug/l	4.0	0.47	2
Cyclohexane	ND		ug/l	20	0.54	2
1,4-Dioxane	ND		ug/l	500	120	2
Freon-113	ND		ug/l	5.0	1.4	2
Methyl cyclohexane	ND		ug/l	20	0.79	2

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	104	70-130	
Toluene-d8	106	70-130	
4-Bromofluorobenzene	107	70-130	
Dibromofluoromethane	103	70-130	



**Project Name:** Lab Number: L2100343 FORMER ROXY **Project Number:** 

Report Date: Not Specified 01/08/21

## Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/07/21 08:18

Analyst: PD

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS	· Westborough Lab	for sample(s):	02-06 Batch:	WG1452741-5
Methylene chloride	ND	ug/l	2.5	0.70
1,1-Dichloroethane	ND	ug/l	2.5	0.70
Chloroform	ND	ug/l	2.5	0.70
Carbon tetrachloride	ND	ug/l	0.50	0.13
1,2-Dichloropropane	ND	ug/l	1.0	0.14
Dibromochloromethane	ND	ug/l	0.50	0.15
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50
Tetrachloroethene	ND	ug/l	0.50	0.18
Chlorobenzene	ND	ug/l	2.5	0.70
Trichlorofluoromethane	ND	ug/l	2.5	0.70
1,2-Dichloroethane	ND	ug/l	0.50	0.13
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70
Bromodichloromethane	ND	ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14
Bromoform	ND	ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17
Benzene	ND	ug/l	0.50	0.16
Toluene	ND	ug/l	2.5	0.70
Ethylbenzene	ND	ug/l	2.5	0.70
Chloromethane	ND	ug/l	2.5	0.70
Bromomethane	ND	ug/l	2.5	0.70
Vinyl chloride	ND	ug/l	1.0	0.07
Chloroethane	ND	ug/l	2.5	0.70
1,1-Dichloroethene	ND	ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70
Trichloroethene	ND	ug/l	0.50	0.18
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70



Project Number: Not Specified Report Date: 01/08/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/07/21 08:18

Analyst: PD

Parameter	Result	Qualifier Units	RL	MDL
Volatile Organics by GC/MS - Wes	stborough Lab f	or sample(s): 02-06	Batch:	WG1452741-5
1,4-Dichlorobenzene	ND	ug/l	2.5	0.70
Methyl tert butyl ether	ND	ug/l	2.5	0.70
p/m-Xylene	ND	ug/l	2.5	0.70
o-Xylene	ND	ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND	ug/l	2.5	0.70
Styrene	ND	ug/l	2.5	0.70
Dichlorodifluoromethane	ND	ug/l	5.0	1.0
Acetone	ND	ug/l	5.0	1.5
Carbon disulfide	ND	ug/l	5.0	1.0
2-Butanone	ND	ug/l	5.0	1.9
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0
2-Hexanone	ND	ug/l	5.0	1.0
Bromochloromethane	ND	ug/l	2.5	0.70
1,2-Dibromoethane	ND	ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70
Isopropylbenzene	ND	ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND	ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND	ug/l	2.5	0.70
Methyl Acetate	ND	ug/l	2.0	0.23
Cyclohexane	ND	ug/l	10	0.27
1,4-Dioxane	ND	ug/l	250	61.
Freon-113	ND	ug/l	2.5	0.70
Methyl cyclohexane	ND	ug/l	10	0.40



Project Number: Not Specified Report Date: 01/08/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/07/21 08:18

Analyst: PD

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-06 Batch: WG1452741-5

		Acceptance		
Surrogate	%Recovery C	lualifier Criteria		
1,2-Dichloroethane-d4	103	70-130		
Toluene-d8	106	70-130		
4-Bromofluorobenzene	107	70-130		
Dibromofluoromethane	102	70-130		



Report Bate.

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/07/21 18:39

Analyst: LAC

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS	- Westborough Lab	for sample(s):	06 Batch:	WG1453048-5
Methylene chloride	ND	ug/l	2.5	0.70
1,1-Dichloroethane	ND	ug/l	2.5	0.70
Chloroform	ND	ug/l	2.5	0.70
Carbon tetrachloride	ND	ug/l	0.50	0.13
1,2-Dichloropropane	ND	ug/l	1.0	0.14
Dibromochloromethane	ND	ug/l	0.50	0.15
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50
Tetrachloroethene	ND	ug/l	0.50	0.18
Chlorobenzene	ND	ug/l	2.5	0.70
Trichlorofluoromethane	ND	ug/l	2.5	0.70
1,2-Dichloroethane	ND	ug/l	0.50	0.13
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70
Bromodichloromethane	ND	ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14
Bromoform	ND	ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17
Benzene	ND	ug/l	0.50	0.16
Toluene	ND	ug/l	2.5	0.70
Ethylbenzene	ND	ug/l	2.5	0.70
Chloromethane	ND	ug/l	2.5	0.70
Bromomethane	ND	ug/l	2.5	0.70
Vinyl chloride	ND	ug/l	1.0	0.07
Chloroethane	ND	ug/l	2.5	0.70
1,1-Dichloroethene	ND	ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70
Trichloroethene	ND	ug/l	0.50	0.18
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70



Project Number: Not Specified Report Date: 01/08/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/07/21 18:39

Analyst: LAC

Parameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS - Wes	stborough Lab	for sample(s): 06	Batch:	WG1453048-5
1,4-Dichlorobenzene	ND	ug/l	2.5	0.70
Methyl tert butyl ether	ND	ug/l	2.5	0.70
p/m-Xylene	ND	ug/l	2.5	0.70
o-Xylene	ND	ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND	ug/l	2.5	0.70
Styrene	ND	ug/l	2.5	0.70
Dichlorodifluoromethane	ND	ug/l	5.0	1.0
Acetone	ND	ug/l	5.0	1.5
Carbon disulfide	ND	ug/l	5.0	1.0
2-Butanone	ND	ug/l	5.0	1.9
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0
2-Hexanone	ND	ug/l	5.0	1.0
Bromochloromethane	ND	ug/l	2.5	0.70
1,2-Dibromoethane	ND	ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70
Isopropylbenzene	ND	ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND	ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND	ug/l	2.5	0.70
Methyl Acetate	ND	ug/l	2.0	0.23
Cyclohexane	ND	ug/l	10	0.27
1,4-Dioxane	ND	ug/l	250	61.
Freon-113	ND	ug/l	2.5	0.70
Methyl cyclohexane	ND	ug/l	10	0.40



Project Number: Not Specified Report Date: 01/08/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/07/21 18:39

Analyst: LAC

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 06 Batch: WG1453048-5

		Acceptance	
Surrogate	%Recovery Q	ualifier Criteria	
1,2-Dichloroethane-d4	103	70-130	
Toluene-d8	106	70-130	
4-Bromofluorobenzene	108	70-130	
Dibromofluoromethane	102	70-130	



Project Number: Not Specified Report Date: 01/08/21

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/07/21 16:26

Analyst: MKS

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS - \	Westborough Lab	for sample(s): 01	Batch:	WG1453094-5
Methylene chloride	ND	ug/l	2.5	0.70
1,1-Dichloroethane	ND	ug/l	2.5	0.70
Chloroform	ND	ug/l	2.5	0.70
Carbon tetrachloride	ND	ug/l	0.50	0.13
1,2-Dichloropropane	ND	ug/l	1.0	0.14
Dibromochloromethane	ND	ug/l	0.50	0.15
1,1,2-Trichloroethane	ND	ug/l	1.5	0.50
Tetrachloroethene	ND	ug/l	0.50	0.18
Chlorobenzene	ND	ug/l	2.5	0.70
Trichlorofluoromethane	ND	ug/l	2.5	0.70
1,2-Dichloroethane	ND	ug/l	0.50	0.13
1,1,1-Trichloroethane	ND	ug/l	2.5	0.70
Bromodichloromethane	ND	ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND	ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND	ug/l	0.50	0.14
Bromoform	ND	ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND	ug/l	0.50	0.17
Benzene	ND	ug/l	0.50	0.16
Toluene	ND	ug/l	2.5	0.70
Ethylbenzene	ND	ug/l	2.5	0.70
Chloromethane	ND	ug/l	2.5	0.70
Bromomethane	ND	ug/l	2.5	0.70
Vinyl chloride	ND	ug/l	1.0	0.07
Chloroethane	ND	ug/l	2.5	0.70
1,1-Dichloroethene	ND	ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND	ug/l	2.5	0.70
Trichloroethene	ND	ug/l	0.50	0.18
1,2-Dichlorobenzene	ND	ug/l	2.5	0.70
1,3-Dichlorobenzene	ND	ug/l	2.5	0.70



### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/07/21 16:26

Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
olatile Organics by GC/MS - We	stborough Lab	for samp	le(s): 01	Batch:	WG1453094-5
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	74	J	ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40



Project Number: Not Specified Report Date: 01/08/21

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 01/07/21 16:26

Analyst: MKS

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1453094-5

			Acceptance	
Surrogate	%Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	100		70-130	
Toluene-d8	101		70-130	
4-Bromofluorobenzene	101		70-130	
Dibromofluoromethane	99		70-130	



Project Name: FORMER ROXY

Project Number: Not Specified

Lab Number: L2100343

**Report Date:** 01/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
/olatile Organics by GC/MS -	Westborough Lab Associated	I sample(s):	02-06 Batch: '	WG1452741-3	WG1452741-4				
Methylene chloride	97		100		70-130	3		20	
1,1-Dichloroethane	110		110		70-130	0		20	
Chloroform	100		100		70-130	0		20	
Carbon tetrachloride	100		100		63-132	0		20	
1,2-Dichloropropane	110		110		70-130	0		20	
Dibromochloromethane	110		110		63-130	0		20	
1,1,2-Trichloroethane	110		110		70-130	0		20	
Tetrachloroethene	100		110		70-130	10		20	
Chlorobenzene	110		110		75-130	0		20	
Trichlorofluoromethane	91		93		62-150	2		20	
1,2-Dichloroethane	100		110		70-130	10		20	
1,1,1-Trichloroethane	100		100		67-130	0		20	
Bromodichloromethane	100		100		67-130	0		20	
trans-1,3-Dichloropropene	100		110		70-130	10		20	
cis-1,3-Dichloropropene	100		100		70-130	0		20	
Bromoform	100		100		54-136	0		20	
1,1,2,2-Tetrachloroethane	110		110		67-130	0		20	
Benzene	110		110		70-130	0		20	
Toluene	110		110		70-130	0		20	
Ethylbenzene	110		110		70-130	0		20	
Chloromethane	96		100		64-130	4		20	
Bromomethane	47		55		39-139	16		20	
Vinyl chloride	100		110		55-140	10		20	



Project Name: FORMER ROXY

Project Number: Not Specified

Lab Number: L2100343

**Report Date:** 01/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	02-06 Batch: W0	G1452741-3 WG1452741-4		
Chloroethane	110		110	55-138	0	20
1,1-Dichloroethene	110		110	61-145	0	20
trans-1,2-Dichloroethene	110		110	70-130	0	20
Trichloroethene	100		100	70-130	0	20
1,2-Dichlorobenzene	100		110	70-130	10	20
1,3-Dichlorobenzene	110		110	70-130	0	20
1,4-Dichlorobenzene	110		110	70-130	0	20
Methyl tert butyl ether	100		100	63-130	0	20
p/m-Xylene	110		110	70-130	0	20
o-Xylene	105		110	70-130	5	20
cis-1,2-Dichloroethene	100		110	70-130	10	20
Styrene	105		110	70-130	5	20
Dichlorodifluoromethane	75		76	36-147	1	20
Acetone	110		100	58-148	10	20
Carbon disulfide	92		93	51-130	1	20
2-Butanone	100		100	63-138	0	20
4-Methyl-2-pentanone	110		110	59-130	0	20
2-Hexanone	110		110	57-130	0	20
Bromochloromethane	110		110	70-130	0	20
1,2-Dibromoethane	100		100	70-130	0	20
1,2-Dibromo-3-chloropropane	94		96	41-144	2	20
Isopropylbenzene	120		120	70-130	0	20
1,2,3-Trichlorobenzene	76		83	70-130	9	20



**Project Name:** FORMER ROXY

**Project Number:** Not Specified Lab Number:

L2100343

Report Date: 01/08/21

Parameter	LCS %Recovery	Qual	_	.CSD ecovery	%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by GC/MS - Westborough La	•		02-06	Batch:		2			
1,2,4-Trichlorobenzene	88			93	70-130	6		20	
Methyl Acetate	110			110	70-130	0		20	
Cyclohexane	110			120	70-130	9		20	
1,4-Dioxane	106			104	56-162	2		20	
Freon-113	110			110	70-130	0		20	
Methyl cyclohexane	100			100	70-130	0		20	

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	103	103	70-130
Toluene-d8	108	109	70-130
4-Bromofluorobenzene	111	109	70-130
Dibromofluoromethane	100	101	70-130

Project Name: FORMER ROXY

Project Number: Not Specified

Lab Number: L2100343

**Report Date:** 01/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s): (	06 Batch: WG1	453048-3	WG1453048-4			
Methylene chloride	95		87		70-130	9		20
1,1-Dichloroethane	110		98		70-130	12		20
Chloroform	99		90		70-130	10		20
Carbon tetrachloride	97		86		63-132	12		20
1,2-Dichloropropane	110		100		70-130	10		20
Dibromochloromethane	100		92		63-130	8		20
1,1,2-Trichloroethane	100		98		70-130	2		20
Tetrachloroethene	97		87		70-130	11		20
Chlorobenzene	100		96		75-130	4		20
Trichlorofluoromethane	84		76		62-150	10		20
1,2-Dichloroethane	100		94		70-130	6		20
1,1,1-Trichloroethane	95		85		67-130	11		20
Bromodichloromethane	98		88		67-130	11		20
trans-1,3-Dichloropropene	99		90		70-130	10		20
cis-1,3-Dichloropropene	97		89		70-130	9		20
Bromoform	96		89		54-136	8		20
1,1,2,2-Tetrachloroethane	110		100		67-130	10		20
Benzene	100		94		70-130	6		20
Toluene	100		95		70-130	5		20
Ethylbenzene	100		93		70-130	7		20
Chloromethane	92		84		64-130	9		20
Bromomethane	31	Q	34	Q	39-139	9		20
Vinyl chloride	95		86		55-140	10		20



Project Name: FORMER ROXY

Project Number: Not Specified

Lab Number: L2100343

**Report Date:** 01/08/21

arameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
olatile Organics by GC/MS - Westboroug	h Lab Associated	sample(s): (	06 Batch: WG1	453048-3	WG1453048-4				
Chloroethane	100		94		55-138	6		20	
1,1-Dichloroethene	99		90		61-145	10		20	
trans-1,2-Dichloroethene	100		92		70-130	8		20	
Trichloroethene	97		89		70-130	9		20	
1,2-Dichlorobenzene	100		95		70-130	5		20	
1,3-Dichlorobenzene	100		96		70-130	4		20	
1,4-Dichlorobenzene	100		96		70-130	4		20	
Methyl tert butyl ether	98		91		63-130	7		20	
p/m-Xylene	105		95		70-130	10		20	
o-Xylene	100		95		70-130	5		20	
cis-1,2-Dichloroethene	100		93		70-130	7		20	
Styrene	105		95		70-130	10		20	
Dichlorodifluoromethane	66		60		36-147	10		20	
Acetone	99		90		58-148	10		20	
Carbon disulfide	84		76		51-130	10		20	
2-Butanone	99		96		63-138	3		20	
4-Methyl-2-pentanone	110		100		59-130	10		20	
2-Hexanone	100		98		57-130	2		20	
Bromochloromethane	100		99		70-130	1		20	
1,2-Dibromoethane	99		92		70-130	7		20	
1,2-Dibromo-3-chloropropane	88		84		41-144	5		20	
Isopropylbenzene	110		97		70-130	13		20	
1,2,3-Trichlorobenzene	70		72		70-130	3		20	



Project Name: FORMER ROXY

Project Number: Not Specified

Lab Number:

L2100343

Report Date:

01/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	
raiametei	78Necovery	Quai	7011CCCVC1Y	Quai	Lillits	KPD	Quai	Lillits	
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s): 06	Batch: WG	31453048-3	WG1453048-4				
1,2,4-Trichlorobenzene	82		79		70-130	4		20	
Methyl Acetate	110		100		70-130	10		20	
Cyclohexane	100		96		70-130	4		20	
1,4-Dioxane	84		84		56-162	0		20	
Freon-113	98		89		70-130	10		20	
Methyl cyclohexane	94		86		70-130	9		20	

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	104	104	70-130
Toluene-d8	108	107	70-130
4-Bromofluorobenzene	108	108	70-130
Dibromofluoromethane	103	101	70-130

Project Name: FORMER ROXY

Project Number: Not Specified

Lab Number: L2100343

**Report Date:** 01/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s): 01	Batch: WG1	453094-3	WG1453094-4			
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	95		95		63-132	0		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	110		100		70-130	10		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	99		100		67-130	1		20
trans-1,3-Dichloropropene	110		100		70-130	10		20
cis-1,3-Dichloropropene	100		95		70-130	5		20
Bromoform	120		100		54-136	18		20
1,1,2,2-Tetrachloroethane	110		100		67-130	10		20
Benzene	110		100		70-130	10		20
Toluene	110		100		70-130	10		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	110		110		64-130	0		20
Bromomethane	97		110		39-139	13		20
Vinyl chloride	100		98		55-140	2		20



Project Name: FORMER ROXY

Project Number: Not Specified

Lab Number: L2100343

**Report Date:** 01/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	RPD Qual Limits
Volatile Organics by GC/MS - Westborough	Lab Associated	sample(s): 0	1 Batch: WG1	453094-3	WG1453094-4		
Chloroethane	100		110		55-138	10	20
1,1-Dichloroethene	100		100		61-145	0	20
trans-1,2-Dichloroethene	100		100		70-130	0	20
Trichloroethene	100		100		70-130	0	20
1,2-Dichlorobenzene	100		100		70-130	0	20
1,3-Dichlorobenzene	110		100		70-130	10	20
1,4-Dichlorobenzene	110		100		70-130	10	20
Methyl tert butyl ether	97		100		63-130	3	20
p/m-Xylene	100		105		70-130	5	20
o-Xylene	105		100		70-130	5	20
cis-1,2-Dichloroethene	100		100		70-130	0	20
Styrene	105		100		70-130	5	20
Dichlorodifluoromethane	100		100		36-147	0	20
Acetone	110		94		58-148	16	20
Carbon disulfide	100		100		51-130	0	20
2-Butanone	100		94		63-138	6	20
4-Methyl-2-pentanone	96		96		59-130	0	20
2-Hexanone	95		97		57-130	2	20
Bromochloromethane	110		110		70-130	0	20
1,2-Dibromoethane	100		100		70-130	0	20
1,2-Dibromo-3-chloropropane	96		100		41-144	4	20
Isopropylbenzene	120		100		70-130	18	20
1,2,3-Trichlorobenzene	110		100		70-130	10	20



Project Name: FORMER ROXY

Project Number: Not Specified

Lab Number:

L2100343

Report Date:

01/08/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	⁄ Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Volatile Organics by GC/MS - Westborough L	•		Batch: W		WG1453094-4	7.1. 2			
1,2,4-Trichlorobenzene	110		110		70-130	0		20	
Methyl Acetate	98		100		70-130	2		20	
Cyclohexane	100		98		70-130	2		20	
1,4-Dioxane	138		128		56-162	8		20	
Freon-113	100		100		70-130	0		20	
Methyl cyclohexane	110		100		70-130	10		20	

Surrogate	LCS %Recovery Qual	LCSD %Recovery Qual	Acceptance Criteria
1,2-Dichloroethane-d4	95	98	70-130
Toluene-d8	102	94	70-130
4-Bromofluorobenzene	115	102	70-130
Dibromofluoromethane	99	101	70-130

Project Name: FORMER ROXY Lab Number: L2100343 Project Number: Not Specified

Report Date: 01/08/21

### Sample Receipt and Container Information

YES Were project specific reporting limits specified?

**Cooler Information** 

Container Information

**Custody Seal** Cooler

Α Absent

Container into	rmation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	рН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2100343-01A	Vial HCI preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-01B	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-01C	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-02A	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-02B	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-02C	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-03A	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-03B	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-03C	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-04A	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-04B	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-04C	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-05A	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-05B	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-05C	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-06A	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-06B	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-06C	Vial HCl preserved	Α	NA		3.3	Υ	Absent		NYTCL-8260-R2(14)
L2100343-07A	Vial HCl preserved	Α	NA		3.3	Υ	Absent		ARCHIVE()



#### **GLOSSARY**

#### **Acronyms**

LOD

MS

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments

from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis

of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of

analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content,

where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated

using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's

reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile

Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL

includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less

than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the

associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF

and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



#### **Footnotes**

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'. Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). If a "Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

#### Data Qualifiers

- A -Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I The lower value for the two columns has been reported due to obvious interference.
- Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



#### **Data Qualifiers**

- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q -The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- **RE** Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.

Report Format: DU Report with 'J' Qualifiers



Project Name:FORMER ROXYLab Number:L2100343Project Number:Not SpecifiedReport Date:01/08/21

#### REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

### LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc. Facility: Company-wide Department: Quality Assurance

Title: Certificate/Approval Program Summary

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### Certification Information

#### The following analytes are not included in our Primary NELAP Scope of Accreditation:

#### Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: lodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene

EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.

**SM4500**: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

### **Mansfield Facility**

**SM 2540D:** TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

EPA TO-12 Non-methane organics

EPA 3C Fixed gases

Biological Tissue Matrix: EPA 3050B

#### The following analytes are included in our Massachusetts DEP Scope of Accreditation

#### Westborough Facility:

#### **Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; SM4500NO3-F: Nitrate-N, Nitrite-N; SM4500F-C, SM4500CN-CE,

EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B

EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.

#### Non-Potable Water

SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate. **EPA 624.1**: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), EPA 600/4-81-045: PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.

### Mansfield Facility:

### **Drinking Water**

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. EPA 245.1 Hg. EPA 522.

#### Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

Document Type: Form

Pre-Qualtrax Document ID: 08-113

Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193  Client Information Client: Address: PO Boy  / 2 1 8 Phone: 518 813 Fax: Email: 6 // 6 hoy These samples have be	115 6 3597 werry ex. com	Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105  Project Information Project Name: Former Ropey Project Location: Delman  Project # (Use Project name as Project #)  Project Manager: ALPHAQuote #:  Turn-Around Time Standard Due Date:					Deliv	Date Rec' in Lab erables ASP-A EQUIS (1 f Other llatory Requ NY TOGS AWQ Stands NY Restricte NY Unrestrict NYC Sewer	File) Jiremen ards and Use of Use		ALPHA Job #  /2/00343  Billing Information  Same as Client Info Po#  Disposal Site Information  Please identify below location of applicable disposal facilities.  Disposal Facility:  NJ NY Other:  Sample Filtration			
Other project specific	requirements/comm						2600						Done Lab to do Preservation Lab to do  (Please Specify below)	
ALPHA Lab ID (Lab Use Only)		ample ID	Colle Date	Time	Sample Matrix	Sampler's Initials	100						Sample Specific Comments	
00343 0	MW-		12:30:20		AQ	Welt	- X							
202	MW-			1620										
703	MW-			1530										
- ry		#3		1600										
705		ZDR		1430										
-06	MN-	ar		1500		1	1	<u> </u>						
A = None		Westboro: Certification N Mansfield: Certification N Relinguished	No: MA015  Container  Preserv  d By:  Date/Time			Preservative	B	V		Date/Time			Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S	
Form No: 01-25 HC (rev. 3	0-Sept-2013)					7			5				TERMS & CONDITIONS. (See reverse side.)	