



Quarterly Groundwater and Vapor Sampling Report

(January – March 2022)

Roxy Cleaners (442024)

North Greenbush, New York

Prepared for

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



Prepared by

EA Engineering, P.C. and Its Affiliate
EA Science and Technology
269 W. Jefferson Street
Syracuse, New York 13202

September 2022
Version: FINAL
EA Project No. 16025.06

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A handwritten signature in blue ink, appearing to read "Chris Sanson".

12 September 2022

Date

Chris Sanson, Project Manager
EA Science and Technology

A handwritten signature in black ink, appearing to read "J. Von Uderitz".

12 September 2022

Date

Joe Von Uderitz, P.G., Project Geologist
EA Science and Technology

September 2022
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EA Project No. 16025.06

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LIST OF ACRONYMNS AND ABBREVIATIONS

$\mu\text{g/L}$	Microgram(s) per liter
$\mu\text{g/m}^3$	Microgram(s) per cubic meter
AWQS	Ambient water quality standards
COC	Contaminant of concern
DCE	<i>cis</i> -1,2-dichloroethene
EA	Engineering, P.C. and its affiliate EA Science and Technology
FS	Feasibility study
No.	Number
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
ORP	Oxidation-reduction potential
PCE	Tetrachloroethene
pH	Power of hydrogen
RI	Remedial investigation
TCE	Trichloroethene
VOC	Volatile organic compound

1. INTRODUCTION

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C. and its affiliate EA Science and Technology (EA) to perform site management activities at the Roxy Cleaners Site (NYSDEC Site Number [No.] 442024), which includes evaluation and performance of long-term monitoring of groundwater and soil vapor. The area is in a suburban portion of Rensselaer County, in North Greenbush, New York (**Figure 1**).

From 1959 to 1998, Roxy Cleaners, Inc. operated a dry-cleaning establishment at this site and allegedly spilled dry-cleaning solvents, which resulted in contamination of the site's soil and groundwater. In 1990, NYSDEC initiated a remedial investigation (RI)/feasibility study (FS) to determine the extent of the contamination. Contaminants were found to be tetrachloroethene (PCE), trichloroethene (TCE), and cis 1,2-dichloroethene (DCE). A treatment system was installed in January 1992 to treat impacted groundwater. Treatment system performance was evaluated until December 2021, when the treatment system was shut off to initiate a rebound study, focused on the groundwater plume and soil vapor associated with the site. As part of the ongoing rebound study for the site, EA is collecting quarterly groundwater, air, and soil vapor samples to evaluate how exactly contaminant of concern (COC) concentrations respond if the plume migrates.

1.1 OBJECTIVES

As part of an ongoing rebound study for 2022, field activities completed at the Roxy Cleaners site have included the collection of aqueous and vapor media to delineate chlorinated volatile organic compounds (VOCs) following the system shutdown on 15 December 2021. This study will assist with the re-evaluation of the treatment system shutdown during the 4th quarter of 2022. This report will summarize sampling activities and results concerning the first quarter of the rebound study.

1.2 REPORT ORGANIZATION

Monitoring activities are discussed in Section 2, VOC concentration trends are discussed in Section 3, and conclusions and recommendations are discussed in Section 4.

The following are provided as appendices:

- Appendix A— Daily Field Reports
- Appendix B— Field Forms and Photolog
- Appendix C— Analytical Summary Tables
- Appendix D— Laboratory Reports
- Appendix E— Groundwater Time Series Plots
- Appendix F— Air and Soil Vapor Time Series Plots
- Appendix G— Data Validation Reports.

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2. MONITORING ACTIVITIES

Site activities for the first quarter of 2022 included the gauging of monitoring wells and the collection of groundwater, indoor air, outdoor air, and soil vapor samples. A Summary of samples collected is provided in **Table 1**. Site activities took place from 15 to 16 March and 4 and 5 April 2022. Daily field reports are included in **Appendix A** and a photographic log is provided in **Appendix B**.

2.1 GROUNDWATER GAUGING

Groundwater levels were recorded on 15 March 2022, prior to the initiation of groundwater sampling to determine groundwater flow patterns in the overburden and bedrock. Depth to groundwater was measured from 25 wells (**Figures 2 and 3**) by measuring from the top of the inner polyvinyl chloride casing using a water-level indicator. Groundwater depths and total depths are provided in monitoring well gauging logs in **Appendix B** and groundwater contours for bedrock and overburden monitoring wells are detailed in **Figures 4 and 5**.

2.2 GROUNDWATER SAMPLING

A total of 9 groundwater samples were collected, with 1 matrix spike/matrix spike duplicate, 1 field duplicate, and 1 trip blank. Quality control samples are summarized in **Table 1**. Two wells scheduled for first quarter sampling (MW-105A and MW-113A) could not be located and were not gauged or sampled. Wells were purged using a peristaltic pump, with a flow rate of approximately 0.3 liters per minute until the field parameters stabilized at which time groundwater samples were collected for analysis of VOCs.

Water quality parameters including temperature, potential hydrogen (pH), oxidation-reduction potential (ORP), conductivity, dissolved oxygen, and turbidity were monitored during purging using a Horiba U-52 water quality monitoring system with flow-through cell. Field parameters were considered stable when the following conditions were met for three consecutive readings:

- pH readings within ± 0.1 pH units
- ORP within ± 10 millivolts
- Dissolved oxygen within 0.3 milligrams per liter
- Specific conductance within ± 3 percent
- Turbidity measurements less than 50 nephelometric turbidity unit.

Dedicated polyethylene tubing was used at each monitoring well location. Non-dedicated sampling equipment (i.e., the water-level indicator) was decontaminated with Alconox detergent and deionized water between well locations to prevent cross-contamination.

In addition, the depth to water was measured throughout purging using a water level indicator. Water quality parameters, calibration forms, field notes, and groundwater sampling purge forms provided in **Appendix B**. Groundwater samples were sent to Con-test in East Longmeadow, Massachusetts for fixed laboratory analysis of VOCs via Method 8260D.

Groundwater samples were collected using clean nitrile gloves and placed in laboratory supplied bottle ware containing appropriate preservatives. Samples were placed on ice in sample coolers immediately after collection to ensure proper preservation. Pertinent sample information was recorded on the associated chain-of-custody, and samples were shipped off-site under secure chain-of-custody protocol.

2.3 AIR SAMPLING

A total of 1 indoor air sample located at [REDACTED], 1 outdoor air sample located outside of the back door of [REDACTED], and 6 soil vapor samples were collected during the first quarterly sampling event. Sample collection is summarized in **Table 1**. The indoor air sample, IA-[REDACTED] was collected from the breathing zone in a first-floor office. The sub-slab sample, SV-[REDACTED] was collected from a soil vapor point in the floor of the same room. All samples were collected over the course of 24 hours on 15 and 16 March 2022 except SV-02 and SV-03, which were resampled over the course of 24 hours on 4 and 5 April 2022. SV-02 and SV-03 could not be sampled during the March sampling event due to faulty flow regulator on the summa canisters . The second mobilization in April lead to successful sampling at these two locations.

During these sampling events, EA utilized Summa[®] canisters with a 24-hour flow rate not to exceed 0.2 liters per minute. PID readings were taken at all vapor points prior to setting up the canisters. All sampling was completed in accordance with the Soil Vapor Intrusion Guidance provided by the New York State Department of Health. Air sampling forms for 8 air samples are included in **Appendix B**. While performing air sampling, EA confirmed that the SSDS system at 125 Main Avenue is functioning. Air and soil vapor samples collected during the March 2022 sampling event were sent to Con-test in East Longmeadow, Massachusetts, for fixed laboratory analysis of VOCs via TO-15. Soil vapor samples collected during the April 2022 sampling event were sent to Pace Analytical in Mount Juliet, Tennessee, for fixed laboratory analysis of VOCs via TO-15.

3. VOLATILE ORGANIC COMPOUND CONCENTRATION TRENDS

COCs in aqueous and gaseous media for the site are PCE, TCE, and DCE. Concentrations of the COCs for the site will serve as a metric to evaluate rebound following system shutoff. In general, VOC concentrations for the first quarter sampling event are comparable to baseline samples, which were collected while the treatment system was operating in the fourth quarter of 2021. Baseline samples were collected from 16 to 18 November 2021, from the same wells and air sample locations targeted for the quarterly sampling, except for air samples OA-[REDACTED] and SV-02, which were not sampled during the baseline sampling event. SV-02 was determined to be damaged at the time of sampling and OA-[REDACTED] was not considered a necessary sampling point because it is outside air around [REDACTED]

3.1 GROUNDWATER COC CONCENTRATION TRENDS

EA compared groundwater analytical results to the NYSDEC Ambient Water Quality Standards (AWQS) of 5 micrograms per liter ($\mu\text{g}/\text{L}$) for PCE, TCE, and DCE. Groundwater COC concentrations for the first quarterly sampling event of 2022 included PCE concentrations in exceedance of NYSDEC AWQS at wells MW-115A, TW-06, TW-08, TW-09, and TW-10. Additionally, DCE exceedances were noted at wells MW115A, TW-06, and TW-08. The maximum detected PCE concentration occurred at TW-10 with a concentration of 190 $\mu\text{g}/\text{L}$. The maximum detected DCE concentration occurred at TW-08 with a concentration of 14 $\mu\text{g}/\text{L}$. It is worth noting that no TCE exceedances occurred for any wells, but detections were present. Vinyl Chloride (VC) was only detected in one well (TW-06) at a concentration of 0.76 $\mu\text{g}/\text{L}$, below the AWQS of 1 $\mu\text{g}/\text{L}$. COC concentrations for wells sampled in the first quarter of 2022 are summarized in **Table 2** and detailed in **Figure 6**. Analytical results are summarized in **Appendix C** and laboratory reports are presented in **Appendix D**.

When comparing COC concentrations derived from the first quarterly sampling event of 2022 to baseline samples collected during the fourth quarter of 2021, PCE, TCE, and DCE concentrations all remained comparable. No new exceedances occurred for any analytes at any particular well, nor did any wells that noted elevated concentrations during the baseline sampling event increase in concentration for the first sampling event.

Time series plots for groundwater data are presented in **Appendix E**. The series plots were created by normalizing analytical concentrations of PCE, TCE, and DCE to the NYSDEC AWQS at 5 $\mu\text{g}/\text{L}$, then plotting them. Non-detect values are plotted as half the limit of detection for each applicable analyte and then normalized by the NYSDEC AWQS value, this is done rather than enter ‘0’ for a non-detect value since the concentration for the analyte could exist anywhere from the laboratory limit of detection to zero.

3.2 AIR AND SOIL VAPOR CONTAMINANT OF CONCERN CONCENTRATION TRENDS

Air and soil vapor COC concentrations for the first quarterly sampling event of 2022 included detections of PCE in samples IA-[REDACTED] SV-02, SV-03, and SV-[REDACTED]. Additionally, detections of TCE in IA-[REDACTED] and SV-03, and a detection of DCE at IA-[REDACTED]. The indoor air sample, IA-[REDACTED] contained

the highest detected concentrations of PCE and TCE at 5.5 $\mu\text{g}/\text{m}^3$ and 1.1 $\mu\text{g}/\text{m}^3$, respectively. COC concentrations and detections for air and soil vapor samples in the first quarter of 2022 are summarized in **Table 3** and detailed in **Figure 7**. Analytical results are summarized in **Appendix C** and laboratory reports are presented in **Appendix D**.

When comparing COC concentrations derived from the first quarterly sampling event of 2022 to baseline samples collected during the fourth quarter of 2021, PCE, TCE, and DCE concentrations all remained comparable.

PID readings were also taken at each of the SVP points and PID readings ranged from 73 ppb at the OA-[REDACTED] location to 3444 ppb at the SV-[REDACTED] location. Results from the PID readings can be found in **Table 4** as well as the field forms in **Appendix A**.

Time series plots for indoor air and soil vapor data are presented in **Appendix F**. Time series plots were created by plotting PCE, TCE, and DCE values. Non-detect values are plotted as half the laboratory limit of detection for each applicable analyte.

Compared to the New York State Department of Health (NYSDOH) Air Guideline Values (AGVs) for COCs associated with indoor air sample location IA-[REDACTED] and sub-slab sample at location SV-[REDACTED] sub-slab air PCE concentrations remain below less than 30 $\mu\text{g}/\text{m}^3$, indicating that no soil vapor intrusion mitigation efforts are needed at this time for PCE. Sub-slab TCE concentrations for SV-[REDACTED] were non-detectable, and indoor air samples for IA-[REDACTED] were found to be 1.1 $\mu\text{g}/\text{m}^3$. **Appendix G** contains data validation reports for samples IA-[REDACTED] and SV-[REDACTED]. No major discrepancies were found upon data validation for each sample.

4. CONCLUSIONS AND RECOMMENDATIONS

The results from the first quarter of sampling indicate groundwater COC concentrations remain comparable to baseline concentrations, revealing slight decreases in COCs but no reduction in the number of wells containing exceedances. Indoor air and soil vapor samples remain comparable as well, with no significant increases observed.

Groundwater concentrations of site-related COCs detected at temporary wells TW-08, TW-09 and TW-10, located near the parking lot of 184 Main Ave adjacent to the Site, indicate that vapor intrusion of VOCs could be a concern in the 184 Main Ave property (active gas station/store). Therefore, vapor intrusion in the property at 184 Main Ave should be evaluated. Per NYSDEC's request, EA is recommending the addition of the building located at 184 Main Avenue, Wynantskill, NY to the indoor air/sub-slab soil vapor analytical sampling for the upcoming heating season.

Based on results from the first quarterly sampling event for 2022, EA will continue to monitor and evaluate COC concentration trends over the course of the next three sampling events. Upon completion of the fourth sampling event, EA will determine via Mann-Kendal Statistical analysis if concentrations are increasing, decreasing, or not exhibiting a trend. Upon completion of the statistical tests and evaluation of the data, EA will make a recommendation regarding the progress of the rebound study and if additional remedial activities, including an injection event, are warranted at the site.

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Tables

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Table 1. Summary of Samples Collected (March and April 2022)

Well ID	Sample ID	Sample Date	Sample Time	MS/MSD	Trip Blank Associated
Aqueous Media					
MW-114A	442024-MW-114A	03/15/2022	1342	Y	442024-TB
MW-115A	442024-MW-115A	03/15/2022	1440	N	442024-TB
MW-106A	442024-MW-106A	03/15/2022	1535	N	442024-TB
MW-111	442024-MW-111	03/15/2022	1647	N	442024-TB
TW-07	442024-TW-07	03/16/2022	0854	N	442024-TB
TW-08	442024-TW-08	03/16/2022	0938	N	442024-TB
TW-10	442024-TW-10	03/16/2022	1054	N	442024-TB
TW-09	442024-TW-09	03/16/2022	1146	N	442024-TB
TW-06	442024-TW-06	03/16/2022	1225	N	442024-TB
Air Samples					
Canister ID	Sample ID	Sample Date ¹	Sample Time	MS/MSD	Trip Blank Associated
10240	IA-[REDACTED]	3/16/2022	1009	N	NA
010208	SV-[REDACTED]	3/16/2022	1012	N	NA
12306	OA-[REDACTED]	3/16/2022	1019	N	NA
009210	SV-01	3/16/2022	1024	N	NA
009046	SV-04	3/16/2022	1115	N	NA
010234	SV-05	3/16/2022	1051	N	NA
8094	8094-SV-02-4422	04/04/2022	1320	N	NA
8255	8094-SV-03-4422	04/04/2022	1330	N	NA
QC Samples					
Associated Parent Sample	Sample ID	Sample Date	Sample Time	QC Type	
442024-TW-10	442024-FD-031622	03/16/2022	0000	Field Duplicate	
NA	442024-TB	03/16/2022	0000	Trip Blank	

Notes:

¹ The sample date is representative of the completion time for a 24-hr sample interval. All samples were deployed successfully for the 24-hour interval.

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Table 2. Summary of Rebound Study Groundwater COC Concentrations and Exceedances (March 2022)

DATE	MW-106A			MW-111			MW-114A			MW-115A			TW-06			TW-07			TW-08			TW-09			TW-10		
	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE
November 16-18, 2021 (Baseline)	ND	ND	ND	3.6	ND	ND	ND	ND	ND	63	1.8	9.2	19	ND	11	ND	ND	ND	16	2.1	25	110	ND	ND	200	ND	ND
March 15-16, 2022 (Q1 Sampling Event)	ND	ND	ND	2	ND	ND	ND	ND	ND	49	1.3	7.7	17	3.3	8.2	0.37 J	ND	ND	11	1	14	89	4.1	3.4	190	1.4 JD	0.56 JD

Notes:

Bold values indicate that the analyte was detected greater than the NYSDEC AWQS of 5 µg/L per each analyte.

AWQS = Ambient Water Quality Standard

DCE = cis 1,2-dichloroethene

E = Result exceeded calibration range

J = Analyte detected between the Reported Detection Limit and the Method Detection Limit; concentration estimated

ND = The analyte was analyzed for but was not detected above the sample reporting limit.

NYSDEC = New York State Department of Environmental Conservation

PCE = Tetrachloroethene

TCE = Trichloroethene

Samples are reported in microgram(s) per liter (µg/L).

Table 3. Summary of Rebound Study Air COC Concentrations (March and April 2022)

DATE	IA-[REDACTED]			OA-[REDACTED]			SV-01			SV-02*			SV-03*			SV-04			SV-05			SV-[REDACTED]		
	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE	PCE	TCE	DCE
November 17, 2021 (Baseline)	6.4	ND	ND	-	-	-	ND	ND	ND	-	-	-	ND	ND	ND	ND	ND	ND	16	2.1	25	6.3	0.22	ND
March 16 and April 04, 2022 (Q1 Sampling Event)	5.5	1.1	0.14	ND	ND	ND	ND	ND	ND	0.917 J	ND	ND	1.97	0.428 J	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND

Notes:

1. NYSDOH Ambient Air Guidelines and Immediate Action Levels apply to indoor air and outdoor air samples; New York currently does not have any standards, criteria, or guidance values for concentrations of compounds in sub-slab vapor. Guidelines and Action Levels are based on the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006, and NYSDOH Soil Vapor Intrusion Updates dated September 2013 and August 2015.

*A second sampling effort was required to collect these samples. Samples could not be collected at SV-02 and SV-03 in March due to faulty gauges for the Summa® canisters.

--- = Not available

DCE = cis 1,2-dichloroethene

J = Analyte detected between the Reported Detection Limit and the Method Detection Limit; concentration estimated

ND = The analyte was analyzed for but was not detected above the sample reporting limit.

NYSDEC = New York State Department of Environmental Conservation

PCE = Tetrachloroethene

TCE = Trichloroethene

Samples are reported in microgram(s) per cubic meter ($\mu\text{g}/\text{m}^3$).

Table 4. Summary of Soil Vapor Point Monitoring (March 2022)

Point ID	Reading Date	Unit	PID Reading
SVP-01	06/13/2022	ppb	2857
SVP-02	06/13/2022	ppb	302
SVP-03	06/13/2022	ppb	229
SVP-04	06/13/2022	ppb	857
SVP-05	06/13/2022	ppb	89
SVP-[REDACTED] Sub-Slab	06/13/2022	ppb	3444
SVP-[REDACTED] Indoor Air	06/13/2022	ppb	301

Notes:

ID = Identification

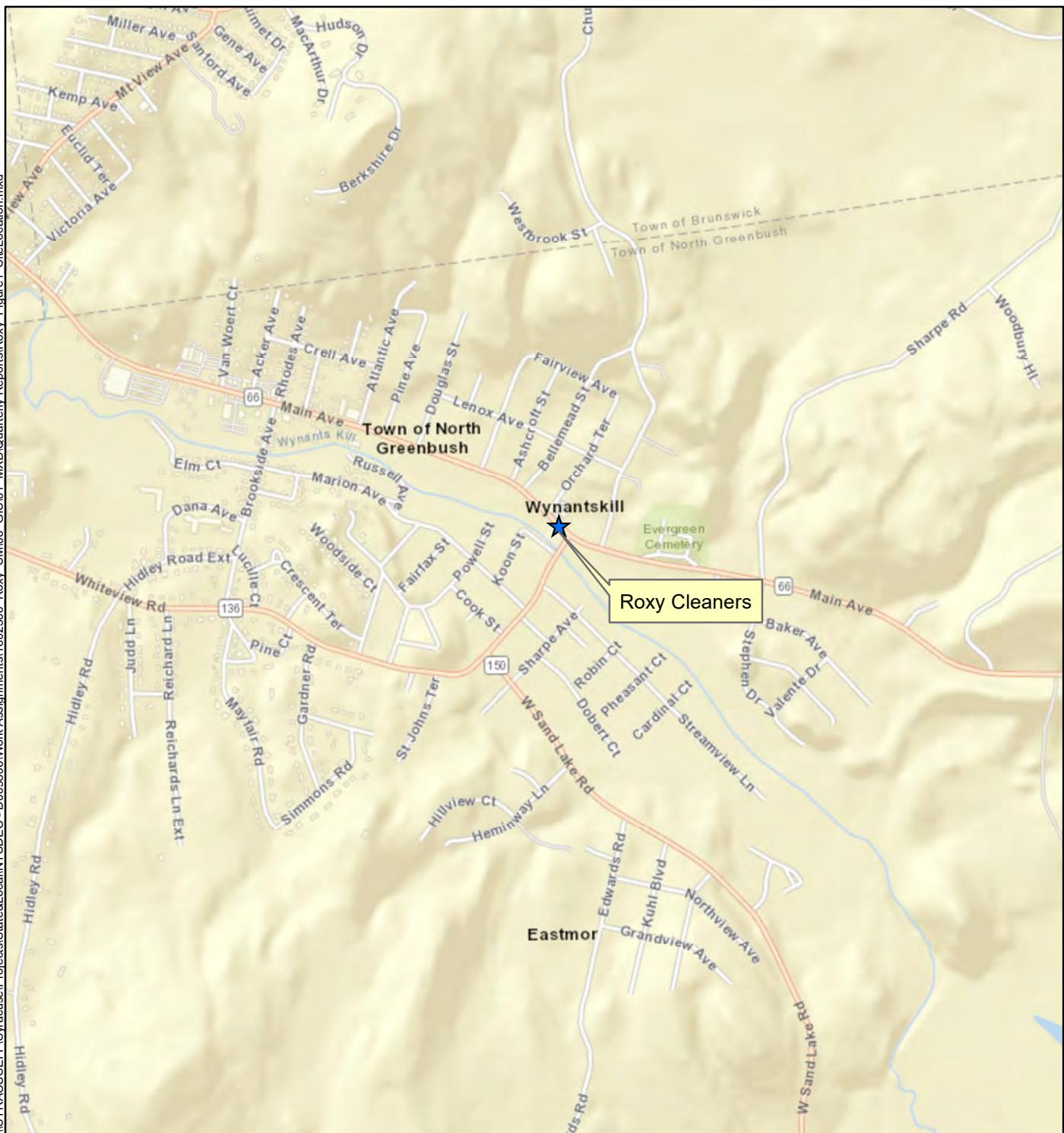
PID = Photoionization detector

ppb = Part(s) per billion

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Figures

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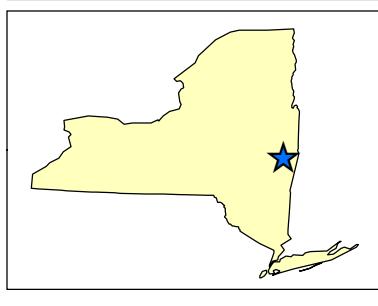


Legend

★ Site Location

Figure 1

SITE LOCATION MAP
Roxy Cleaners Site (Site No. 442024)
North Greenbush, New York



0 0.125 0.25 0.5
Miles

1 inch = 0.25 miles

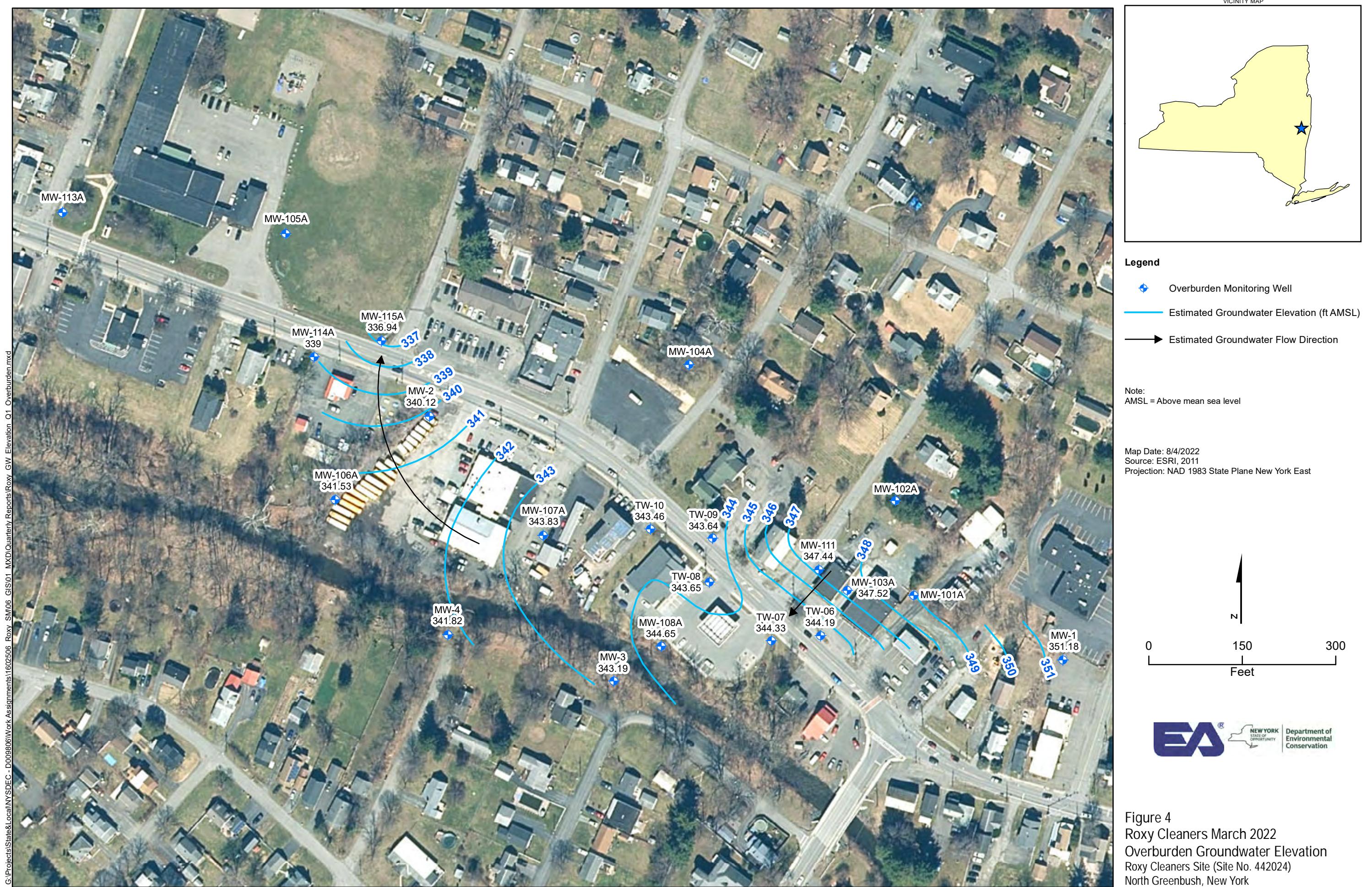


Map Date: 4/29/2022
Projection: NAD_1983_StatePlane_New_York_East_FIPS_3101_Feet

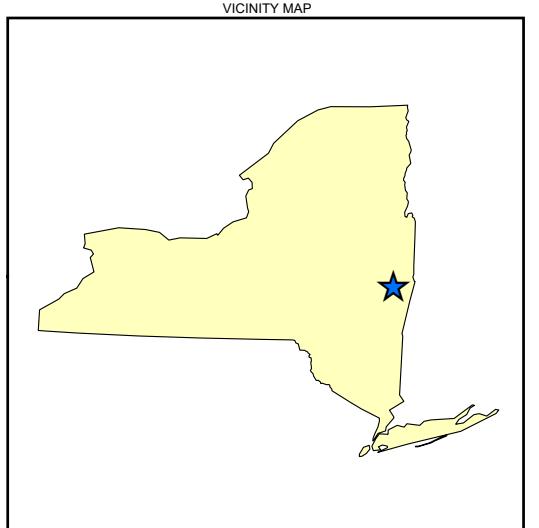
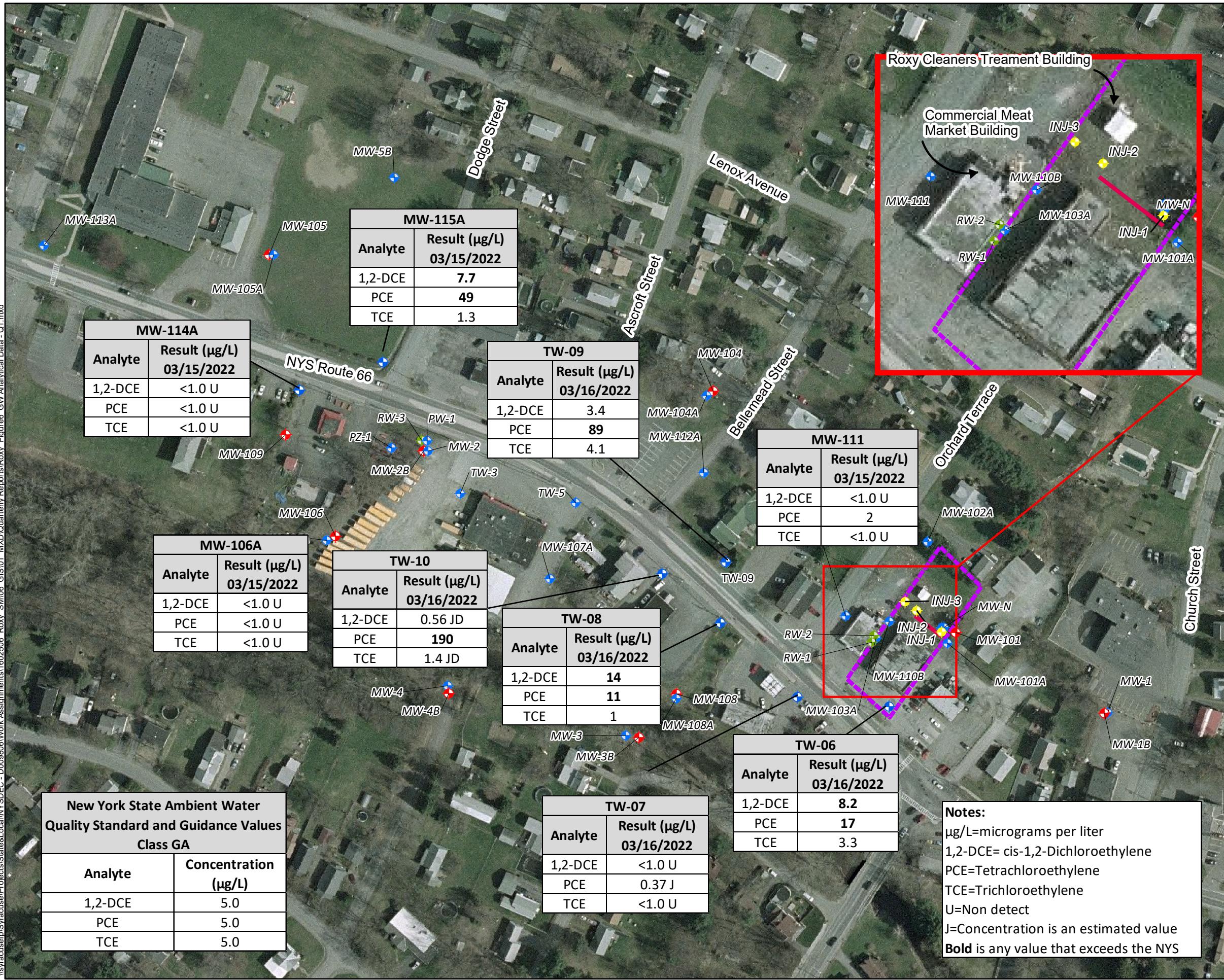
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Legend

- Overburden Monitoring Well
- Bedrock Monitoring Well
- Recovery Well
- Bedrock Injection Wells
- Injection Trench
- Roxy Cleaners Parcel

Map Date: 9/15/2022
Source: ESRI, 2011
Projection: NAD 1983 State Plane New York East

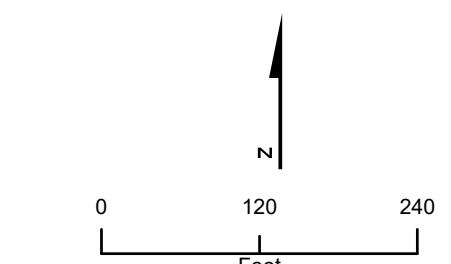
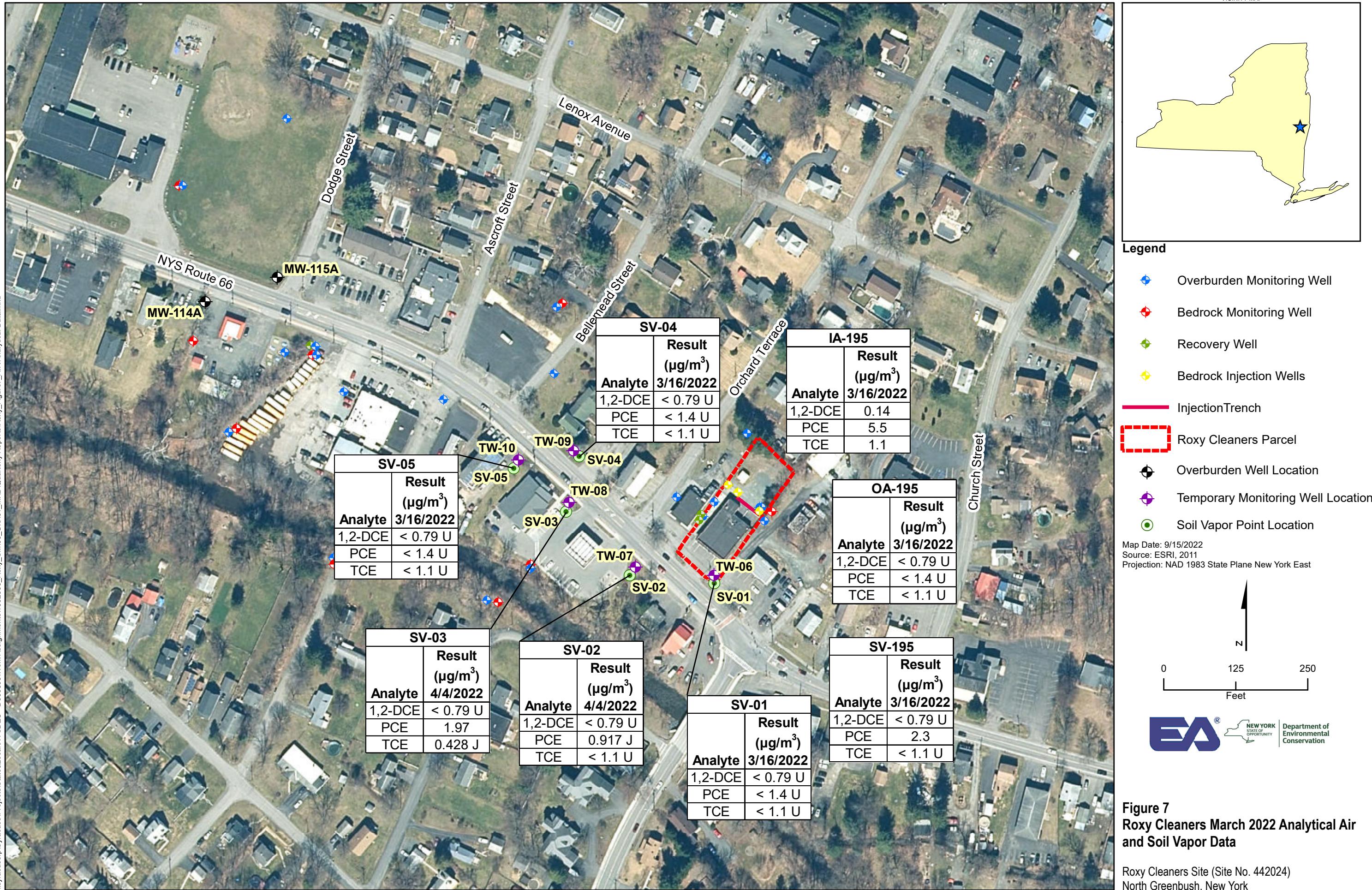


Figure 6
Roxy Cleaners March 2022
Analytical Groundwater Data
Roxy Cleaners Site (Site No. 442024)
North Greenbush, New York



Appendix A

Daily Field Reports

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DAILY FIELD REPORT

Day: Tuesday Date: 03/15/2022

Temperature: (F) 36-51

Wind Direction: E

Project Name: Roxy Cleaners**Weather:** Cloudy (am)

Partly cloudy (pm)

NYSDEC Site # 442024**Contract #** D009806**Arrive at site:** 0815**Location:** Watervliet, New York**Leave site:** 1715**HEALTH & SAFETY:**

Are there any changes to the Health & Safety Plan? Yes () No (x)
 (If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?	Soil	Yes ()	n/a (x)	* No ()
	Waters	Yes ()	n/a (x)	* No ()
	Air	Yes ()	n/a (x)	* No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached: Yes () No (x)
 Photos Taken: Yes (x) No ()

DESCRIPTION OF DAILY WORK PERFORMED:

N. Robinson (EA), M. Gilkey (EA), onsite at 0815. EA began calibrating equipment and N. Robinson provide tailgate safety meeting (0826). EA began gauging wells consistent with 15-month sampling (0830). EA completed gauging wells (1054). EA unable to located wells scheduled for Q1 sampling MW-113A and MW-105A. EA deploy SV-[REDACTED] and IA-[REDACTED] inside [REDACTED] building (1112). EA deploy outdoor air sample behind treatment building OA-[REDACTED] (1124) EA deploy SV-01(1139). EA deploy SV-02 (1150). EA deploy SV-03 (1200). EA deploy SV-04 (1210). EA deploy SV-05 (1218). EA mob to MW-114A. M. Gilkey start purge at MW-114A and N. Robinson attempts to locate MW-113A and MW-105A again (1242). EA sample MW-114A with MS/MSD (1342). EA mob to MW-115A. EA sample MW-115A (1446). EA mob to MW-106A. EA sample MW-106A (1535). EA mob to site to dump purge water into IDW drum. EA mob to MW-111. EA sample MW-111 (1647). EA offsite (1715).

SAMPLING (Soil/Water/Air)

The groundwater following samples were collected on 03/15/2022 for VOCs:

Sample ID	Sample Time	Split with
442024-MW-114A	1342	MW/MSD
442024-MW-115A	1446	
442024-MW-106A	1535	
442024-MW-111	1647	

DAILY FIELD REPORT

Day: Tuesday Date: 03/15/2022

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:*EA personnel:* N. Robinson, M. Gilkey*EA equipment:* Two ppbRAE, two Horiba U52-2 Water Quality Meter, two Heron Skinny Dipper 200' Water Level Meters, two Peristaltic pumps*Subcontractor personnel:* None*Subcontractor equipment:* None*(*Indicates active equipment)*

Other Subcontractors: None

VISITORS TO SITE:

None

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

None

ITEMS OF CONCERN:

MW-113A and MW-105A were unable to be located.

COMMENTS:

None

ATTACHMENT(S) TO THIS REPORT:

Photo Log and Site Map

SITE REPRESENTATIVE:

Name: Noah Robinson



03/15/2022

DAILY FIELD REPORT

Day: Wednesday Date: 03/16/2022

Temperature: (F) 37-50

Wind Direction: E

Project Name: Roxy Cleaners**Weather:** Sunny (am)

Sunny (pm)

NYSDEC Site # 442024**Contract #** D009806**Arrive at site:** 0730**Location:** Watervliet, New York**Leave site:** 1330**HEALTH & SAFETY:**

Are there any changes to the Health & Safety Plan? Yes () No (x)
 (If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?	Soil	Yes ()	n/a (x)	* No ()
	Waters	Yes ()	n/a (x)	* No ()
	Air	Yes ()	n/a (x)	* No ()

• If No, provide comments

OTHER ITEMS:

Site Sketch Attached: Yes () No (x)
 Photos Taken: Yes () No (x)

DESCRIPTION OF DAILY WORK PERFORMED:

N. Robinson (EA), M. Gilkey (EA), onsite at 0730. EA began calibrating equipment and N. Robinson provide tailgate safety meeting (0741). EA mobilize to TW-07 and begin purging (0752). EA sampling TW-07 (0854). EA mobilize to TW-08 and begin purging (0906). EA sampling TW-08 (0938). EA mob to TW-10 and begin purge (0949). N. Robinson mob to [REDACTED] building to begin collecting soil vapor summa cans. N. Robinson collect IA-[REDACTED] SV-[REDACTED] OA-[REDACTED] SV-01, SV-02, SV-03, SV-04 and SV-05. Pressures at SV-02 and SV-03 only moved 1 psi and does not believe to have collected a sample. N. Robinson return to M. Gilkey to assist with sampling TW-10 with duplicate (1054). EA mob to TW-09 and begin purge (1114). EA sample TW-09 (1146). EA mob to TW-06 and begin purge (1155). TW-06 water level continues to drop a large amount with little recharge. EA sample TW-06 (1225). EA pack up equipment, dump purge water into IDW drum and offsite (1330).

SAMPLING (Soil/Water/Air)

The groundwater following samples were collected on 03/15/2022 for VOCs:

Sample ID	Sample Time	Split with
442024-TW-07	0854	
442024-TW-08	0938	
442024-TW-10	1054	442024-FD-031622
442024-TW-09	1146	
442024-TW-06	1225	

DAILY FIELD REPORT

Day: Wednesday Date: 03/16/2022

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:*EA personnel:* N. Robinson, M. Gilkey*EA equipment:* Two ppbRAE, two Horiba U52-2 Water Quality Meter, two Heron Skinny Dipper 200' Water Level Meters, two Peristaltic pumps*Subcontractor personnel:* None*Subcontractor equipment:* None*(*Indicates active equipment)*

Other Subcontractors: None

VISITORS TO SITE:

None

PROJECT SCHEDULE ISSUES:

None

PROJECT BUDGET ISSUES:

None

ITEMS OF CONCERN:

None

COMMENTS:

None

ATTACHMENT(S) TO THIS REPORT:

Photo Log and Site Map

SITE REPRESENTATIVE:

Name: Noah Robinson



03/16/2022

Appendix B

Field Forms and Photolog

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INDOOR AIR SAMPLING FORM



EA Engineering, P.C. and Its Affiliate
EA Science and Technology

Project No. 1602504
Project Name: Roy Cleaners
Location: 195 Main
Project Manager: Chris Sanson

Sample Location Information:

Site ID Number:	442024	Sampler(s):	MRI NR
PID Meter Used: (Model, Serial #)	049388 Honeywell pb RAE	Building I.D. No.:	

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR	INDOOR AIR - BASEMENT	SUBSLAB SOIL GAS	OUTDOOR AIR
Flow Regulator No. 00952	Flow Regulator No.	Flow Regulator No.	Flow Regulator No.
Canister Serial No. 10240	Canister Serial No.:	Canister Serial No.:	Canister Serial No.:
Start Date/Time: 03/15/22 11:06	Start Date/Time:	Start Date/Time:	Start Date/Time:
Start Pressure: (inches Hg) 29	Start Pressure: (inches Hg)	Start Pressure: (inches Hg)	Start Pressure: (inches Hg)
Stop Date/Time: 3-16-22 10:09	Stop Date/Time:	Stop Date/Time:	Stop Date/Time:
Stop Pressure: -12 mbar	Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg)
Sample ID: JA-195	Sample ID:	Sample ID:	Sample ID:

Other Sampling Information:

Story/Level	1	Story/Level		Basement or Crawl Space?		Direction from Building	
Room	office	Room		Floor Slab Thickness (inches) [if present]		Distance from Building	
Indoor Air Temp (°F)	70°F	Indoor Air Temp		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	
Barometric Pressure?	N/A	Barometric Pressure?		Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?	
Intake Height Above Floor Level (ft.)	5' 0 ft B/SFA	Intake Height Above Floor Level (ft.)		If slab, intake Depth If Crawl Space, intake height		Distance to nearest Roadway	
Noticeable Odor?	No	Noticeable Odor?		Noticeable Odor?		Noticeable Odor?	
PID Reading (ppb)	301	PID Reading (ppb)		PID Reading (ppb)		PID Reading (ppb)	
Duplicate Sample?	No	Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	

Comments:

All purpose Lubricant

pens

markers

faid

Sampler Signature:

INDOOR AIR SAMPLING FORM



EA Engineering, P.C. and Its Affiliate
EA Science and Technology

Project No. 1602506

Project Name: Roxy Cleaners

Location: 195 Main

Project Manager: Chris Sanson

Sample Location Information:

Site ID Number:	442024	Sampler(s):	N.Robinson, M.Gitk
PID Meter Used: (Model, Serial #)	049388 Honeywell ppb RAE	Building I.D. No.:	

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR	INDOOR AIR - BASEMENT	SUBSLAB SOIL GAS	OUTDOOR AIR
Flow Regulator No. 010208	Flow Regulator No.	Flow Regulator No. 010208	Flow Regulator No.
Canister Serial No. 010494	Canister Serial No.:	Canister Serial No. 010494	Canister Serial No.:
Start Date/Time: 3-15-22	Start Date/Time:	Start Date/Time: 3-15-22	Start Date/Time:
Start Pressure: -29	Start Pressure: (inches Hg)	Start Pressure: -29	Start Pressure: (inches Hg)
Stop Date/Time:	Stop Date/Time:	Stop Date/Time: 3-16-22 10:12	Stop Date/Time:
Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg)	Stop Pressure: -6	Stop Pressure: (inches Hg)
Sample ID: SV-195	Sample ID:	Sample ID: SV-195	Sample ID:

Other Sampling Information:

Story/Level	Ground floor	Story/Level		Basement or Crawl Space?	NA, Ground	Direction from Building	
Room	Back office	Room		Floor Slab Thickness (inches) [if present]	Unknown	Distance from Building	
Indoor Air Temp (°F)	70°F	Indoor Air Temp		Potential Vapor Entry Points Observed?	None	Intake Height Above Ground Level (ft.)	
Barometric Pressure?	NA	Barometric Pressure?		Ground Surface Condition (Crawl Space Only)	Tile floor	Intake Tubing Used?	
Intake/Height Above Floor Level (ft.)	NA	Intake Height Above Floor Level (ft.)		If slab, intake Depth If Crawl Space, intake height	6'	Distance to nearest Roadway	
Noticeable Odor?	NA	Noticeable Odor?		Noticeable Odor?	NA	Noticeable Odor?	
PID Reading (ppb)	301	PID Reading (ppb)		PID Reading (ppb)	3444 ppb	PID Reading (ppb)	
Duplicate Sample?	NA	Duplicate Sample?		Duplicate Sample?	NA	Duplicate Sample?	

Comments:

PID in SV-195

3444 ppb

Sampling pressure?

Sampler Signature:

INDOOR AIR SAMPLING FORM

	EA Engineering, P.C. and Its Affiliate EA Science and Technology	Project No. 16025-06 Project Name: Roxy Cleaners Location: BB Behind Treatment Building Project Manager: Chris Sanson	
Sample Location Information:			
Site ID Number:	442029	Sampler(s): NR / M6	
PID Meter Used: (Model, Serial #)	044388 Honeywell ppb RAE	Building I.D. No.:	
SUMMA Canister Record:			
INDOOR AIR - FIRST FLOOR	INDOOR AIR - BASEMENT	SUBSLAB SOIL GAS	OUTDOOR AIR
Flow Regulator No. 007100	Flow Regulator No.	Flow Regulator No.	Flow Regulator No. 007100
Canister Serial No. 01206	Canister Serial No.:	Canister Serial No.:	Canister Serial No. 12306
Start Date/Time: 03/15/12	Start Date/Time:	Start Date/Time:	Start Date/Time: 03/15/12
Start Pressure: (inches Hg)	Start Pressure: (inches Hg)	Start Pressure: (inches Hg)	Start Pressure: (inches Hg) -30
Stop Date/Time:	Stop Date/Time:	Stop Date/Time:	Stop Date/Time: 3-16-12 1019
Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg) -4
Sample ID: OA-195	Sample ID:	Sample ID:	Sample ID: OA-195
Other Sampling Information:			
Story/Level	Story/Level	Basement or Crawl Space?	Direction from Building
Room	Room	Floor Slab Thickness (inches) [if present]	Distance from Building 3ft
Indoor Air Temp (°F)	Indoor Air Temp	Potential Vapor Entry Points Observed?	Intake Height Above Ground Level (ft.) 3.5
Barometric Pressure?	Barometric Pressure?	Ground Surface Condition (Crawl Space Only)	Intake Tubing Used? No
Intake Height Above Floor Level (ft.)	Intake Height Above Floor Level (ft.)	If slab, intake Depth If Crawl Space, intake height	Distance to nearest Roadway 100ft
Noticeable Odor?	Noticeable Odor?	Noticeable Odor?	Noticeable Odor? No
PID Reading (ppb)	PID Reading (ppb)	PID Reading (ppb)	PID Reading (ppb) 73
Duplicate Sample?	Duplicate Sample?	Duplicate Sample?	Duplicate Sample? No
Comments:			
Sampler Signature: 			

INDOOR AIR SAMPLING FORM

	EA Engineering, P.C. and Its Affiliate EA Science and Technology	Project No. 1602506 Project Name: Roxy Cleaners Location: Project Manager: Chris Sanson		
Sample Location Information:				
Site ID Number:	442024	Sampler(s): MR / MC		
PID Meter Used: (Model, Serial #)	049388 Honeywell ppb RAE	Building ID. No.:		
SUMMA Canister Record:				
INDOOR AIR - FIRST FLOOR	INDOOR AIR - BASEMENT	SUBSLAB SOIL GAS	OUTDOOR AIR	
Flow Regulator No.	Flow Regulator No.	Flow Regulator No. 009676	Flow Regulator No.	
Canister Serial No.	Canister Serial No.	Canister Serial No. 009210	Canister Serial No.:	
Start Date/Time:	Start Date/Time:	Start Date/Time: 02/15 1139	Start Date/Time:	
Start Pressure: (inches Hg)	Start Pressure: (inches Hg)	Start Pressure: (inches Hg) ~ 28	Start Pressure: (inches Hg)	
Stop Date/Time:	Stop Date/Time:	Stop Date/Time: 3-16-27 1024	Stop Date/Time:	
Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg) -3	Stop Pressure: (inches Hg)	
Sample ID:	Sample ID:	Sample ID: SV-01	Sample ID:	
Other Sampling Information:				
Story/Level	Story/Level	Basement or Crawl Space?	N/A	Direction from Building
Room	Room	Floor Slab Thickness (inches) [if present]	N/A	Distance from Building
Indoor Air Temp (°F)	Indoor Air Temp	Potential Vapor Entry Points Observed?	—	Intake Height Above Ground Level (ft.)
Barometric Pressure?	Barometric Pressure?	Ground Surface Condition (Crawl Space Only)	—	Intake Tubing Used?
Intake Height Above Floor Level (ft.)	Intake Height Above Floor Level (ft.)	If slab, intake Depth If Crawl Space, intake height	5'	Distance to nearest Roadway
Noticeable Odor?	Noticeable Odor?	Noticeable Odor?	No	Noticeable Odor?
PID Reading (ppb)	PID Reading (ppb)	PID Reading (ppb)	250	PID Reading (ppb)
Duplicate Sample?	Duplicate Sample?	Duplicate Sample?	No	Duplicate Sample?
Comments:				
Sampler Signature: <u>John Pava</u>				

INDOOR AIR SAMPLING FORM

EA Engineering, P.C. and Its Affiliate
EA Science and TechnologyProject No. 16025-06
Project Name: Roxy Cleaners
Location: Stewart's Parking Lot
Project Manager: Chris Sonnen

Sample Location Information:

Site ID Number:	442024	Sampler(s):	NR MG
PID Meter Used: (Model, Serial #)	649388 Honeywell ppb RAE	Building I.D. No.:	

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.		Flow Regulator No.		Flow Regulator No. 009284		Flow Regulator No.	
Canister Serial No.		Canister Serial No.:		Canister Serial No. 011261		Canister Serial No.:	
Start Date/Time:		Start Date/Time:		Start Date/Time: 03/16 1150		Start Date/Time:	
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg) -30		Start Pressure: (inches Hg)	
Stop Date/Time:		Stop Date/Time:		Stop Date/Time: 3-16-22 1031		Stop Date/Time:	
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg) -29		Stop Pressure: (inches Hg)	
Sample ID:		Sample ID:		Sample ID: SV-02		Sample ID:	

Other Sampling Information:

Story/Level		Story/Level		Basement or Crawl Space?	N/A	Direction from Building	
Room		Room		Floor Slab Thickness (inches) [if present]	N/A	Distance from Building	
Indoor Air Temp (°F)		Indoor Air Temp		Potential Vapor Entry Points Observed?	None	Intake Height Above Ground Level (ft.)	
Barometric Pressure?		Barometric Pressure?		Ground Surface Condition (Crawl Space Only)	N/A	Intake Tubing Used?	
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)		If slab, intake Depth If Crawl Space, intake height	N/A	Distance to nearest Roadway	
Noticeable Odor?		Noticeable Odor?		Noticeable Odor?	No	Noticeable Odor?	
PID Reading (ppb)		PID Reading (ppb)		PID Reading (ppb)	302	PID Reading (ppb)	
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	

Comments:

Gauge was set correctly, pressure went down/up 1 minute
 Screen is likely cracked over at gauge is faulty

Sampler Signature:

INDOOR AIR SAMPLING FORM



EA Engineering, P.C. and Its Affiliate
EA Science and Technology

Project No. 1602501e
Project Name: Roxy Cleaners
Location: Stewarts
Project Manager: Chris Sanso

Sample Location Information:

Site ID Number:	442024	Sampler(s):	NO NR
PID Meter Used: (Model, Serial #)	049385 Honeywell Doh RAK	Building ID. No.:	

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR	INDOOR AIR - BASEMENT	SUBSLAB SOIL GAS	OUTDOOR AIR
Flow Regulator No.	Flow Regulator No.	Flow Regulator No. 009703	Flow Regulator No.
Canister Serial No.	Canister Serial No.	Canister Serial No. 08090	Canister Serial No.
Start Date/Time:	Start Date/Time:	Start Date/Time: 03/15	Start Date/Time:
Start Pressure: (inches Hg)	Start Pressure: (inches Hg)	Start Pressure: (inches Hg) -26	Start Pressure: (inches Hg)
Stop Date/Time:	Stop Date/Time:	Stop Date/Time: 3-16-2010 4:30	Stop Date/Time:
Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg) -21	Stop Pressure: (inches Hg)
Sample ID:	Sample ID:	Sample ID: SV-03	Sample ID:

Other Sampling Information:

Story/Level	Story/Level	Basement or Crawl Space?	N/A	Direction from Building
Room	Room	Floor Slab Thickness (inches) [if present]		Distance from Building
Indoor Air Temp (°F)	Indoor Air Temp	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft)
Barometric Pressure?	Barometric Pressure?	Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?
Intake Height Above Floor Level (ft.)	Intake Height Above Floor Level (ft.)	If slab, intake Depth If Crawl Space, intake height	C'	Distance to nearest Roadway
Noticeable Odor?	Noticeable Odor?	Noticeable Odor?	No	Noticeable Odor?
PID Reading (ppb)	PID Reading (ppb)	PID Reading (ppb)	229	PID Reading (ppb)
Duplicate Sample?	Duplicate Sample?	Duplicate Sample?	No	Duplicate Sample?

Comments:

Gauge was set correctly. Gauge is likely faulty as screen is greater in. when gauge is removed, the pressure doesn't change back to 0.0

Sampler Signature: John Johnson

INDOOR AIR SAMPLING FORM

		EA Engineering, P.C. and Its Affiliate EA Science and Technology		Project No.	
				Project Name: Roxy Cleaners	
				Location: Across st from Stearts	
				Project Manager: Chris Sanso	
Sample Location Information:					
Site ID Number:	142024		Sampler(s):	NR MG	
PID Meter Used: (Model, Serial #)	049388 Honeywell ppb RATE		Building I.D. No.:		
SUMMA Canister Record:					
INDOOR AIR - FIRST FLOOR	INDOOR AIR - BASEMENT	SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.	Flow Regulator No.	Flow Regulator No.	01021A	Flow Regulator No.	
Canister Serial No.	Canister Serial No.:	Canister Serial No.:	000046	Canister Serial No.:	
Start Date/Time:	Start Date/Time:	Start Date/Time:	03/15 12:10	Start Date/Time:	
Start Pressure: (inches Hg)	Start Pressure: (inches Hg)	Start Pressure: (inches Hg)	-29.5	Start Pressure: (inches Hg)	
Stop Date/Time:	Stop Date/Time:	Stop Date/Time:	3-16-22 11:15	Stop Date/Time:	
Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg)	Stop Pressure: (inches Hg)	-23	Stop Pressure: (inches Hg)	
Sample ID:	Sample ID:	Sample ID:	SV-04	Sample ID:	
Other Sampling Information:					
Story/Level	Story/Level	Basement or Crawl Space?	N/A	Direction from Building	
Room	Room	Floor Slab Thickness (inches) [if present]		Distance from Building	
Indoor Air Temp (°F)	Indoor Air Temp	Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft)	
Barometric Pressure?	Barometric Pressure?	Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?	
Intake Height Above Floor Level (ft)	Intake Height Above Floor Level (ft)	If slab, intake Depth If Crawl Space, intake height	6'	Distance to nearest Roadway	
Noticeable Odor?	Noticeable Odor?	Noticeable Odor?	No	Noticeable Odor?	
PID Reading (ppb)	PID Reading (ppb)	PID Reading (ppb)	8.57	PID Reading (ppb)	
Duplicate Sample?	Duplicate Sample?	Duplicate Sample?		Duplicate Sample?	
Comments:					
Summa can was set correctly					
Sampler Signature: <u>Rich Branson</u>					

INDOOR AIR SAMPLING FORM



**EA Engineering, P.C. and Its Affiliate
EA Science and Technology**

Project No. 16028506
Project Name: Roxy Cleaners
Location: Next to Stewarts
Project Manager: Chris Sanson

Sample Location Information:

Site ID Number:	442024	Sampler(s):	NR MG
PID Meter Used: (Model, Serial #)	049388 Ppb RAE	Building ID. No.:	

SUMMA Canister Record:

INDOOR AIR - FIRST FLOOR		INDOOR AIR - BASEMENT		SUBSLAB SOIL GAS		OUTDOOR AIR	
Flow Regulator No.		Flow Regulator No.		Flow Regulator No. 010181		Flow Regulator No.	
Canister Serial No.		Canister Serial No.:		Canister Serial No.: 010234		Canister Serial No.:	
Start Date/Time:		Start Date/Time:		Start Date/Time: 03/15 17:16		Start Date/Time:	
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg) -24		Start Pressure: (inches Hg)	
Stop Date/Time:		Stop Date/Time:		Stop Date/Time: 3-16-22 1051		Stop Date/Time:	
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg) 0		Stop Pressure: (inches Hg)	
Sample ID:		Sample ID:		Sample ID:		Sample ID:	
				SV-05			

Other Sampling Information:

Story/Level		Story/Level		Basement or Crawl Space?	N/A	Direction from Building	
Room		Room		Floor Slab Thickness (inches) [if present]		Distance from Building	
Indoor Air Temp (°F)		Indoor Air Temp		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	
Barometric Pressure?		Barometric Pressure?		Ground Surface Condition (Crawl Space Only)		Intake Tubing Used?	
Intake Height Above Floor Level (ft.)		Intake Height Above Floor Level (ft.)		If slab, intake Depth If Crawl Space, intake height	6'	Distance to nearest Roadway	
Noticeable Odor?		Noticeable Odor?		Noticeable Odor?	NO	Noticeable Odor?	
PID Reading (ppb)		PID Reading (ppb)		PID Reading (ppb)	89	PID Reading (ppb)	
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	NO	Duplicate Sample?	

Comments:

Bastel Cone that was over Sunna can in glass
was moved and knocked over Sunna can pressure was
at Omriten Stroopel

Sampler Signature:

FIELD CALIBRATION FORM
Horiba U-52
pH, CONDUCTIVITY, AND TURBIDITY

CALIBRATION	
DATE:	03/15/22
TIME:	08:35
METER ID:	21165

pH CALIBRATION

pH STANDARD	INITIAL READING	FINAL READING
4.0	6.96	4.579

CONDUCTIVITY CALIBRATION

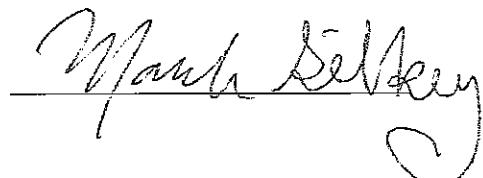
CONDUCTIVITY STANDARD	STANDARD READING	FINAL READING
4.49	4.60	4.570

TURBIDITY CALIBRATION

STANDARD	INITIAL READING	FINAL READING
0 NTU	7.0	0.2

COMMENTS

SIGNATURE



FIELD CALIBRATION FORM
Horiba U-52
pH, CONDUCTIVITY, AND TURBIDITY

CALIBRATION
DATE: 3-16-21
TIME: 0741
METER ID: 21165

pH CALIBRATION

pH STANDARD	INITIAL READING	FINAL READING
4.0	5.62	3.96

CONDUCTIVITY CALIBRATION

CONDUCTIVITY STANDARD	STANDARD READING	FINAL READING
4.49	4.40	4.65

TURBIDITY CALIBRATION

STANDARD	INITIAL READING	FINAL READING
0 NTU	0.5	0.0

COMMENTS

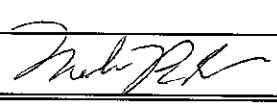
14.40 mg/L DO 9.42

SIGNATURE



FIELD CALIBRATION FORM

Site Name: Roxy Cleaners

INSTRUMENT: Honeywell ppb RAE	INSTRUMENT ID No: 049388
OPERATOR: N. Robison	WEATHER: 36° overcast
SPAN GAS TYPE: Isobutylene 10.0 ppm	DATE: 3-18-22
CALIBRATION NOTES:	
Zero Cal: 16 ppb	
Span Cal: 10.00 ppm	
SIGNATURE: 	DATE: 3-18-22

10	Ray Cleanes	3-15-22	Ray Cleanes	3-15-22
	weather am: 35°F Dewpoint PM: 51°F partly cloudy			
0835	EA (N.Robinson & M.Gilley) arrive at site	1218	EA begin SV-05 stacking pressure -24 psi	
0838	N.Robinson provide safety briefing	1225	EA gets ice for Samples and mob to MW-114A	
0842	EA begins SV-05 stacking well	1241	EA sets up and begins purge at MW-114A	
0844	EA finds snow wall covering TW-114A	1242	N.Robinson mob to MW-113A to attempt to locate well again	
SV-01		1251	N.Robinson unable to locate MW-113A and mob back to MW-114A to help M.Gilley	
1054	EA complete synthetic gas sampling of wells, unable to locate scheduled wells MW-113A and MW-105A.	1257	EA mob back to MW-113A with samples with pet. pump.	
1102	EA mob to 115 min building for intro air samples	1258	EA fix dump and resume purge	
1106	Deploy indoor air sample TA-195 in brick removal 145 min building -29 mbar	1342	Sample MW-114A w/ MS/ASD for VOCs	
1112	EA deploy SV-05. Starting pressure -29 mbar	1355	EA pack up and mob to MW-115A	
1124	Deploy outdoor air sample TA-195 Starting pressure -30	1401	EA begin purge at MW-115A	
1139	EA Deploy SV-01 with starting pressure of -28 mbar	1406	Sample MW-115A for VOCs	
1150	EA deploy SV-05 with starting pressure of -30 mbar	1535	Begin purge at MW-105A for VOCs	
1200	EA deploy SV-03 with starting pressure of -28 mbar	1550	EA break fire blanket and dump Purge water in 55 gallon drum stored below treatment building	
1210	EA deploy SV-04 starting pressure -29.5mbar	1601	EA begin purge at MW-111	
		1653	EA pack up and move equipment to treatment building	
		1705	EA offsite	
			M.Gilley	
			3-15-22	Return the Run

12	Roxy Cleaners	3-16-22	13
	Weimer	am 37 sunny	
0730	N.Robinson & M.Cipher (CR)	pm: 50 Sunny	
0741	Begin calibrating	Equipment and Purge Safety	
0752	Begin to Tw-07 and begin purge		
0854	Sample Tw-07 for VOCs.		
0906	mob to Tw-08 and begin purge		
0938	Sample Tw-08 for VOCs		
0946	End mob to Tw-10 and begin purge		
1001	M.Robinson begins to pick up samples		
1004	Cans		
1012	Stop TA-195 with end pressure of -12 mbar		
1019	Stop SV-195 with end pressure of -6 mbar		
1024	Stop SV-01 with end pressure of -3 mbar		
1031	Stop SV-02 with end pressure of -29.		
	Summer can was set correctly. Gauge was likely faulty as screen is graded in		
1040	Stop SV-03 with end pressure of -27 mbar. Summer can was set correctly. Gauge's likely faulty as screen is graded in		
	Rotameter		

11/14

11/15

11/16

11/17

11/18

11/19

11/20

11/21

11/22

11/23

11/24

11/25

11/26

11/27

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11/30

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12/01

12/02

12/03

12/04

12/05

12/06

12/07

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12/09

12/10

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12/19

12/20

12/21

12/22

12/23

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MONITORING WELL GAUGING LOG

Inspector(s): N.Dobbs, M.Gilkey
 Weather Conditions: 36°F overcast

Site Name: Rocky Cleavers
 Date/Time: 3-15-22

Well ID	PID Reading (ppb (ppm))	DTW (ft. below TOC)	DTB (ft. below TOC)	Well Condition / Notes
MW-1	0.0	12.33	55.86	
MW-1B	—	—	—	Unable to gauge, no surface casing, full of sediment
MW-2	574	12.29	39.02	no lock, stick up
MW-2B	19	14.81	67.00	no lock, stick up
MW-3	0.0	7.74	30.73	no lock, stick up
MW-3B	0.0	6.50	59.73	no lock, stick up
MW-4	0.0	6.95	48.42	no lock, stick up
MW-4B	0.0	6.86	82.41	no J plug or lock, stick up
MW-101	313	6.74	37.69	NO bolts
MW-101A	—	—	—	unable to locate
MW-102A	—	—	—	unable to locate
MW-103A	6	9.09	19.41	No surface casing case
MW-104	37	22.99	35.21	no lock
MW-105	100	4.22	78.30	
MW-105A	—	—	—	unable to locate
MW-106	36	10.68	54.91	PVC is broken and J plug does not cover hole stickup
MW-106A	81	10.15	28.65	hinge broken and stickup
MW-107	—	—	—	
MW-107A	310	8.91	30.55	water frozen in well
MW-108	28	6.34	43.59	no lock, stickup cover broken
MW-108A	0.0	6.54	22.02	stickup cover broken
MW-109	—	—	—	Snow bank over well

MONITORING WELL GAUGING LOG

Inspector(s):

Weather Conditions:

Site Name:

Date/Time:

Well ID	PID Reading (ppm) ppm	DTW (ft. below TOC)	DTB (ft. below TOC)	Well Condition / Notes
MW-111	0.0	8.71	20.28	1 bolt, 8 inch steel well, no J plug
MW-113				unable to locate
MW-114A	220	7.12	40.60	
MW-115A	151	7.64	30.03	J-plug was froze
TW-5	44	9.53	15.95	J-plug destroyed and cracked
TW-06	130.7 ppm	8.03	21.10	Well was frozen over
TW-07	385.4 ppm	7.81	22.95	water frozen around J-plug,
TW-08	194.6	8.48	23.32	
TW-09	331.8	8.91	18.31	
TW-10	10.25 ppm	8.01	17.73	Well pad has sunk, PVC still vertical



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GROUNDWATER SAMPLING PURGE FORM



Well I.D.: N-106A	EA Personnel: NR MG	Client: NYSDEC
Location: Roxy Cleaners	Well Condition: Good	Weather: Partly Cloudy Slight
Sounding Method: Skinny Downhole	Gauge Date: 03/15/22	Measurement Ref: TOC
Stick Up/Down (ft): 21.5 ft	Gauge Time:	Well Diameter (in): 21" PVC

Purge Date:	03/15/22	Purge Time:	1503
Purge Method:	Low Flow	Field Technician:	NR MG

Well Volume	
A. Well Depth (ft):	28.65
B. Depth to Water (ft):	10.61
C. Liquid Depth (ft) (A-B):	18.04
D. Well Volume (ft):	0.163
E. Well Volume (gal) C'D:	611
F. Five Well Volumes (gal) (E3):	3055.5
Pump Type:	Perrin
Pump Designation:	141

Water Quality Parameters							DO (ug/L)	Turbidity (ntu)
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (lpm)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity (µS/cm)	
15.05	10.61	0	0.75	7.04	171	11.80	0.8440	3.33
15.0	10.40	1.75	7.10	158	11.73	0.844	1.32	4.2
15.15	10.49	2.50	7.10	142	11.03	0.846	1.11	4.3
15.18	10.46	3.75	7.10	136	11.01	0.846	1.03	4.4
15.95	10.49	5.0	7.09	131	10.99	0.846	0.97	3.5
15.28	10.49	6.25	7.09	129	10.98	0.846	0.94	3.4
15.35	10.40	7.5	7.04	123	10.96	0.846	0.90	2.1

Total Quantity of Water Removed (gal):

Samplers: Sampling Date:

Sampling Time:
Split Sample With
Sample Type:

1535

COMMENTS AND OBSERVATIONS:



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**GROUNDWATER SAMPLING
PURGE FORM**



Well I.D.: NJ - III	EA Personnel: N2/MG	Client: NYSDDEC
Location: Roxy Cleaners	Well Condition:	Weather: Rainy Day 50°F
Sounding Method: Skinny Dipper-VLT	Gauge Date: 03/15/2022	Measurement Ref:
Stick Up/Down (ft): Flush	Gauge Time:	Well Diameter (in): 84 Steel

Purge Date:	03/15/22	Purge Time:	16:10
Purge Method:	Low flow w/ Perri	Field Technician:	NR/MG

		Well Volume	
A. Well Depth (ft):	B. Depth to Water (ft):	D. Well Volume (ft):	E. Well Volume (gal) C*):
78.728	6.09	2,641	2,227,641
C. Liquid Depth (ft) (A-B):		F. Five Well Volumes (gal) (E3):	G. Pump Designation:
6.54		151,321	Pump 1

Water Quality Parameters							
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temperature (°C)	Conductivity (µS/cm)
1612	8.69	0	0.25	7.11	211	10.72	0.688
1617	8.69	8125	1	6.85	213	10.45	0.691
1622	8.69	2.5	1	6.76	211	10.79	0.698
1627	8.10	3.75	1	6.72	211	10.24	0.686
1632	8.69	1	6.69	211	10.27	0.697	4.07
1637	8.10	1	6.68	211	10.26	0.698	4.32
1642	8.10	1	6.66	212	10.27	0.687	4.36
1647	8.69	1	6.66	214	10.18	0.689	4.75

Total Quantity of Water Removed (gal):

Samplers:
Sampling Date:

Sampling Time:
Split Sample With:
Sample Type:

1647

COMMENTS AND OBSERVATIONS:



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EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM



Well I.D.: MW-114A	EA Personnel: NR MG	Client: NYSDEC
Location: Roxy Cleaners	Well Condition: Good	Weather: Sunny 50°F.
Sounding Method: Skim Dumper WLT	Gauge Date: 03/15	Measurement Ref: TOC
Stick Up/Down (ft): Flush	Gauge Time:	Well Diameter (in): 2" PVC

Purge Date: 03/15/22	Purge Time: 12:57
Purge Method: Low flow w/ pump	Field Technician: NR MG

Well Volume	
A. Well Depth (ft): 48.60	D. Well Volume (ft): 0.163
B. Depth to Water (ft): 7.50	E. Well Volume (gal) C*D): 51.40
C. Liquid Depth (ft) (A-B): 33.10	F. Five Well Volumes (gal) (E3): 27.0

Water Quality Parameters						
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temperature (oC)
12.57	7.48	0	0.18	6.15	273	11.77
12.60	7.39	1.4	0.30	7.0	1184	0.678
13.07	7.39	2.8	1	6.36	175	14.65
13.11	7.37	4.2	1	6.37	159	14.61
13.17	7.31	5.6	1	6.39	145	14.61
13.22	7.31	7.0	1	6.40	129	14.67
13.27	7.38	8.4	1	6.39	121	14.69
13.32	7.38	9.8	1	6.40	114	14.71
13.37	7.34	11.8	1	6.40	111	14.73
13.42	7.38	12.0	1	6.41	107	14.74

Total Quantity of Water Removed (gal): NR MG	Sampling Time: 13:42
Samplers: NS NSD	Split Sample With: NS NSD
Sampling Date: 03/15/22	Sample Type: G4/G5

COMMENTS AND OBSERVATIONS:



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GROUNDWATER SAMPLING PURGE FORM



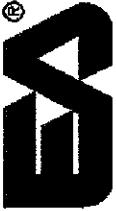
Well I.D.:	WW-115A	EA Personnel:	N.E. MG	Client:	NYSDEC
Location:	Roxy Cleaners	Well Condition:	Good	Weather:	Sunny 51°F
Sounding Method:	Skimmy Digger (W.I.T.)	Gauge Date:	03/15/22	Measurement Ref:	
Stick Up/Down (ft):	Flush	Gauge Time:		Well Diameter (in):	24 PVC

Purge Date:	03/15/22	Purge Time:	14:01
Purge Method:	Low Flow	Field Technician:	N.R. MG

Well Volume					
A. Well Depth (ft):	30.03	D. Well Volume (ft ³):	0.163	Depth/Height of Top of PVC:	
B. Depth to Water (ft):	5.00	E. Well Volume (gal) C*D):	2,480	Pump Type:	Peristaltic
C. Liquid Depth (ft) (A-B):	24.43	F. Five Well Volumes (gal) (E3):	0.14, 0.1	Pump Designation:	

Water Quality Parameters						
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temperature (oC)
14:01	5.60	0	0.30	6.42	2016	14.87
14:06	5.00	11.5	1	6.50	1910	14.33
14:11	5.60	3.0	1	6.50	1629	13.43
14:16	5.60	4.5	1	6.50	1546	13.18
14:21	5.60	19.0	1	6.51	1433	13.08
14:26	5.60	7.5	1	6.51	1330	13.07
14:31	5.60	9.0	1	6.51	1222	13.07
14:36	5.60	10.5	1	6.51	1116	13.04
14:41	5.60	13.0	1	6.51	1102	13.04
14:46	5.60	13.5	1	6.51	1057	13.04

Total Quantity of Water Removed (gal): 1440
 Samplers: N.R. MG
 Sampling Date: 03/15/22
 Sampling Time: 14:00
 Split Sample With: N.R. MG
 Sample Type: Split
 COMMENTS AND OBSERVATIONS: _____



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**GROUNDWATER SAMPLING
PURGE FORM**



Well I.D.: TW-06	EA Personnel: NRWMS	Client: NYSDEC
Location: Roxy Cleaners	Well Condition: OK	Weather: SOFE Sunny
Sounding Method: WLR	Gauge Date: 03/15/11	Measurement Ref: T06
Stick Up/Down (ft): 1100	Gauge Time:	Well Diameter (in): 24 DIA

Purge Date:	03/16/22	Purge Time:	1155
Purge Method:	LSD Flow	Field Technician:	NR/MG

Well Volume	
A. Well Depth (ft):	D. Well Volume (ft ³): 0.163
B. Depth to Water (ft):	E. Well Volume (gal) C*D: 0.19
C. Liquid Depth (ft) (A-B): 13.43	F. Five Well Volumes (gal) (E3): 0.195

Water Quality Parameters									
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity (µS/cm)	DO (ug/L)	Turbidity (ntu)
1155	7.07	0	0.3	6.65	153	11.94	1.42	1.89	105
1200	10.21	1.5	1	6.65	295	11.90	1.34	0.71	35.2
1205	11.34	2.0	1	6.67	-12	11.69	1.33	0.48	19.3
1210	12.15	4.5	1	6.70	-27	11.57	1.34	0.50	18.3
1215	14.29	9.0	1	6.71	-37	11.62	1.34	0.38	16.3
1220	15.33	7.5	1	6.73	-39	11.69	1.34	0.37	10.0
1225	16.40	9.0	1	6.74	-93	11.70	1.34	0.28	16.8

Total Quantity of Water Removed (gal):

Samplers:

Sampling Time: Split Sample With
Sample Type:

COMMENTS AND OBSERVATIONS:



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GROUNDWATER SAMPLING PURGE FORM



Well I.D.: TW-07	EA Personnel: NR MC	Client: NYSDEC
Location: Roxy Cleaners	Well Condition: Good	Weather: 37° Sunny
Sounding Method: WL	Gauge Date: 3-15-22	Measurement Ref:
Stick Up/Down (ft): 10 ft	Gauge Time:	Well Diameter (in): 2

Purge Date: 3-16-22	Purge Time: 0752
Purge Method: Low Flow	Field Technician: NR MC

Well Volume	
A. Well Depth (ft): 23-32 ft	D. Well Volume (ft): 0.163
B. Depth to Water (ft): 8-14 ft	E. Well Volume (gal) C'D): 0.247
C. Liquid Depth (ft) (A-B): 15.14	F. Five Well Volumes (gal) (E3): 1.234

Water Quality Parameters						
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temperature (oC)
					(µS/cm)	Conductivity (µg/L)
0.754	8.74	—	0.30	5.52	163	0.842
0.759	8.91	1.5	5.23	109	10.77	0.727
0.804	8.64	3.0	6.01	97	10.44	0.781
0.809	8.96	4.5	5.48	99	10.71	0.783
0.814	9.00	6.0	5.41	118	0.719	1.29
0.817	8.80	7.5	5.81	129	10.37	0.650
0.824	8.45	9.0	5.87	137	10.34	0.681
0.829	8.04	10.5	5.87	134	10.35	0.678
0.834	8.44	12.0	5.89	130	10.43	0.688
0.839	8.44	13.5	5.93	113	10.43	0.762
0.844	8.44	15.0	5.96	110	10.55	0.711
0.849	8.44	16.5	5.96	113	10.53	0.714
0.954	8.04	3.94	1.17	1057	1.84	2.35

Total Quantity of Water Removed (gal): NR MC	Sampling Time: 0854
Samplers: 3-16-22	Split Sample With: —
Sampling Date: 08/04/2022	Sample Type: CDO
COMMENTS AND OBSERVATIONS: Fluoride Horizon @ 0.800	



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**GROUNDWATER SAMPLING
PURGE FORM**



Well I.D.: TW-68	EA Personnel: MR. M &	Client: NYSDEC
Location: Roxy Cleaners	Well Condition: Good	Weather: 38° F Sunny
Sounding Method: WL/N	Gauge Date: 3-15-22	Measurement Ref:
Stick Up/Down (ft): 100	Gauge Time:	Well Diameter (in): 2

Purge Date:	3-16-22	Purge Time:	0906
Purge Method:	Low Flow	Field Technician:	MKMC

Well Volume		Depth/Height of Top of PVC:	
A. Well Depth (ft):	D. Well Volume (ft):	E. Well Volume (gal) C*D):	Pump Type:
23.3	616.3	8,128	per.
B. Depth to Water (ft):	C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3):	Pump Designation:

Water Quality Parameters							
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (lpm)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity (µS/cm)
0908	8.35	15	0.30	6.27	+25	10.78	0.598
0913	8.34	15		6.19	110	10.84	0.610
0918	8.36	3.0		6.17	108	10.85	0.612
0923	8.36	34.5		6.16	109	10.94	0.624
0928	8.36	6.0		6.16	111	10.95	0.631
0933	8.36	7.5		6.16	113	10.99	0.635
0938	8.34	9.0		6.16	114	10.98	0.637

Total Quantity of Water Removed (gal): _____
Samplers: _____ Sampling Date: _____

Sampling Time:
Split Sample With:
Sample Type:

0938 — Grab

COMMENTS AND OBSERVATIONS:



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EA Science and Technology**

**GROUNDWATER SAMPLING
PURGE FORM**



Well I.D.:	TR-09	EA Personnel:	NR/MG	Client:	NYSDEC
Location:	Roxy Cleaners	Well Condition:	Good	Weather:	Sunny
Sounding Method:		Gauge Date:	03/15/22	Measurement Ref:	TOC
Stick Up/Down (ft):	Flush	Gauge Time:		Well Diameter (in):	211 PVC

Purge Date:	03/16/22	Purge Time:	11:15
Purge Method:	Low flow semi planned	Field Technician:	NR/MG

Well Volume			
A. Well Depth (ft):	B. Depth to Water (ft):	C. Liquid Depth (ft) (A-B):	D. Well Volume (ft): <u>18,31</u>
E. Well Volume (gal) C*D: <u>1,355</u>	F. Five Well Volumes (gal) (E3): <u>7,151</u>	G. Pump Type: <u>Pump</u>	H. Pump Designation:

Water Quality Parameters								Turbidity (ntu)
Time (hrs)	DTW (ft bftoc)	Volume (liters)	Rate (L/min)	pH (pH units)	ORP (mV)	Temperature (°C)	Conductivity (µS/cm)	DO (ug/L)
11 1.0	3.8	1	0.3	5.37	230	10.60	3.53	5.41
11 2.1	9.85	1.5	0.10	2.19	9.78	3.64	2.61	8.69
11 2.6	8.82	3.0	0.13	2.12	9.71	3.66	7.54	8.4
11 3.1	4.93	9.5	0.14	2.09	9.43	3.67	2.50	5.10
11 3.6	4.67	6.0	0.15	2.06	9.28	3.60	2.02	3.0
11 4.1	3.07	7.5	0.15	3.201	9.40	3.59	2.30	2.1
11 4.6	8.92	9.0	0.16	1.98	9.57	3.47	3.34	0.8

Total Quantity of Water Removed (gal):

Samplers:
Sampling Date:

Sampling Time:
Split Sample With:
Sample Type:

1146

COMMENTS AND OBSERVATIONS:



EA Engineering P.C. and its Affiliate
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM



Well I.D.: TW-10 (1st purge)	EA Personnel: NRC NC	Client: NYSDEC
Location: Roxy Cleaners	Well Condition:	Weather: Hot & fully cloudy
Sounding Method: WLN	Gauge Date: 3-15-22	Measurement Ref:
Stick Up/Down (ft): 50ft	Gauge Time:	Well Diameter (in): 2

Purge Date: 3-16-22	Purge Time: 0949
Purge Method: N/A	Field Technician: N/A M/L

Well Volume	
A. Well Depth (ft): 7.73	D. Well Volume (ft): 0.03
B. Depth to Water (ft): 8.01	E. Well Volume (gal) C*D): 1.58
C. Liquid Depth (ft) (A-B): 7.2	F. Five Well Volumes (gal) (E3): 7.92
Pump Designation:	

Water Quality Parameters						
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temperature (oC)
					(us/cm)	Conductivity (µS/cm)
0949	7.91	—	0.30	7.25	194	10.56
0954	7.96	1.5	—	6.20	10.20	0.723
0954	7.97	3.0	—	6.19	13.3	0.730
1004	7.99	4.5	—	6.17	18.6	10.00
1009	8.00	6.0	—	6.10	18.5	10.74
1014	8.00	7.5	—	6.10	18.5	10.03
1019	8.00	9.0	—	6.10	18.6	10.09
1024	8.00	10.5	—	6.10	18.6	10.19
1029	8.03	12.0	—	6.10	18.6	10.16
1034	8.01	13.5	—	6.10	18.6	10.40
1039	8.01	15.0	—	6.15	18.6	10.43
1044	8.01	16.5	—	6.15	18.4	10.55

- Total Quantity of Water Removed (gal): NRC/MG
Samplers: 031622
- Sampling Time: 0949
Split Sample With: DUP
Sample Type: GREC
- COMMENTS AND OBSERVATIONS:
-
-
-



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**GROUNDWATER SAMPLING
PURGE FORM**



Well I.D.: TW-10 (2nd page)	EA Personnel: NEIMA	Client: NYSDDEC
Location: Roxy Cleaners	Well Condition:	Weather: 45°F Sunny
Sounding Method:	Gauge Date: 03/15/22	Measurement Ref: /
Stick Up/Down (ft):	Gauge Time:	Well Diameter (in): 24" PVC

Purge Date:	03/16/27	Purge Time:	0949
Purge Method:	Normal Purge	Field Technician:	ARLW

Well Volume	
A. Well Depth (ft):	D. Well Volume (ft):
B. Depth to Water (ft):	E. Well Volume (gal) C*D): 0
C. Liquid Depth (ft) (A-B):	F. Five Well Volumes (gal) (E3): 0
	Depth/Height of Top of PVC:
	Pump Type:
	Pump Designation:

Water Quality Parameters						
Time (hrs)	DTW (ft btoe)	Volume (liters)	Rate (L/min)	pH (pH units)	ORP (mV)	Temperature (°C)
					Conductivity (µS/cm)	DO (µg/L)
1049	06.02	15.0	0.3	8.15	1955	10.56
1054	4.02	10.5	0.3	8.15	1844	10.58
						10.72
						2.34
						2.31
						2.30
						1.21

Total Quantity of Water Removed (gal): NR Wq
Samplers: o 3 14 22
Sampling Date:

Sampling Time:
Split Sample With:
Sample Type:

1054
DUP
GEMB

COMMENTS AND OBSERVATIONS:

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03/15/2022 10:17:40

TW-10



03/15/2022 10:17:43

TW-10



03/15/2022 10:19:35

TW-7



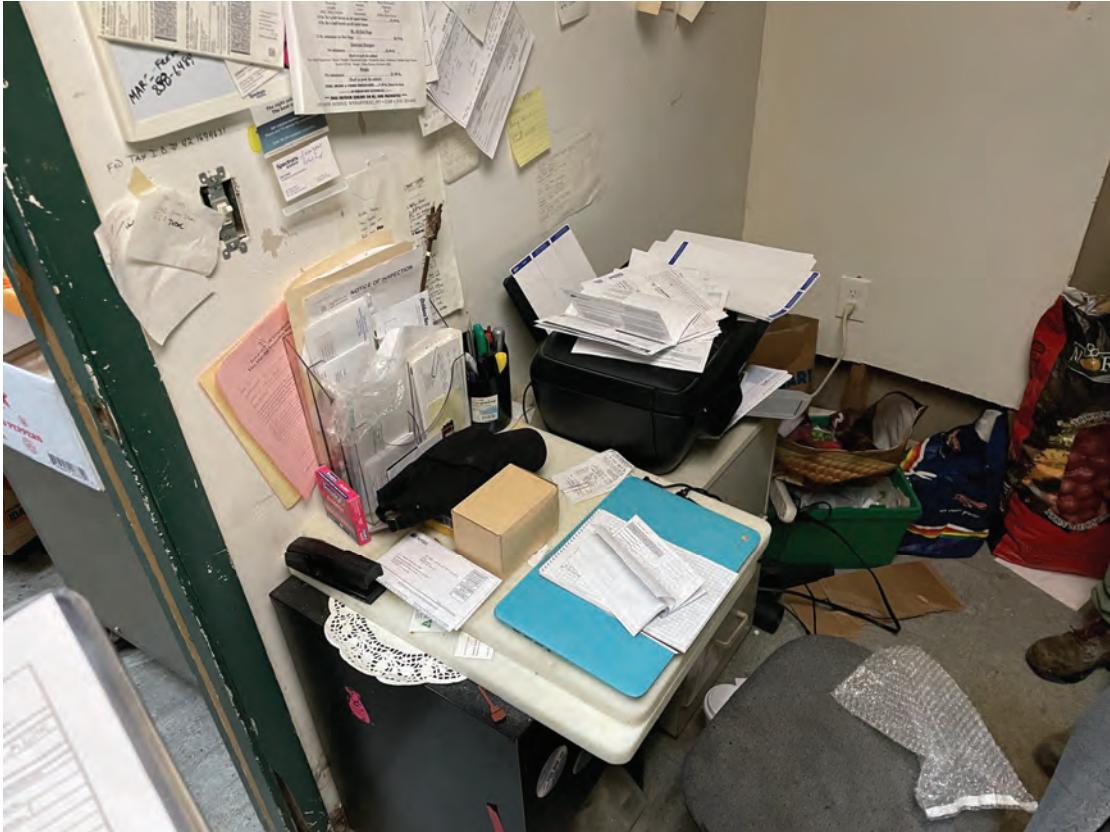
03/15/2022 11:17:47

SV-[REDACTED]



03/15/2022 11:17:50

IA-[REDACTED]



03/15/2022 11:17:52

Inside where IA-[REDACTED] was deployed



03/15/2022 11:52:01

SV-02



03/15/2022 12:46:43

MW-13



03/15/2022 12:46:46

MW-13



03/16/2022 09:41:27

TW-10



03/16/2022 13:15:46

IDW



03/16/2022 13:15:50

IDW

Appendix C

Analytical Summary Tables

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Table C-1. Groundwater Analytical Results

Location ID		NYSDEC Class GA AWQS	MW-114A	MW-115A	MW-106A	MW-111	TW-07	TW-08	TW-10	TW-10	TW-09	TW-06	Trip Blank	
Sample Name			442024-MW-114A	442024-MW-115A	442024-MW-106A	442024-MW-111	442024-TW-07	442024-TW-08	442024-TW-10	442024-FD-031622	442024-TW-09	442024-TW-06	442024-TB 20220316	
Parent Sample ID										TW-10				
Sample Date			3/15/2022	3/15/2022	3/15/2022	3/15/2022	3/16/2022	3/16/2022	3/16/2022	3/16/2022	3/16/2022	3/16/2022	3/16/2022	
Analyte	Unit		Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	
VOCs (E624.1 and EPA 524.2 / SOP DW-1)														
1,1,1,2-Tetrachloroethane	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	
1,1,1-Trichloroethane (TCA)	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	
1,1,2,2-Tetrachloroethane	µg/L	5.0	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<1.0 U	<1.0 U	<0.5 U	<0.5 U	<0.5 U	
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
1,1,2-Trichloroethane	µg/L	1.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
1,1-Dichloroethane	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
1,1-Dichloroethene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
1,1-Dichloropropene	µg/L	5.0	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<4.0 U	<4.0 U	<2.0 U	<2.0 U	<2.0 U	
1,2,3-Trichlorobenzene	µg/L	5.0	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<10 U	<10 U	<5.0 U	<5.0 U	<5.0 U	
1,2,3-Trichloropropane	µg/L	0.04	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<4.0 U	<4.0 U	<2.0 U	<2.0 U	<2.0 U	
1,2,4-Trichlorobenzene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
1,2,4-Trimethylbenzene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	19	<1.0 U	<2.0 U	<2.0 U	<1.0 U	8.9	<1.0 U	
1,2-Dibromo-3-Chloropropane	µg/L	0.04	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<10 U	<10 U	<5.0 U	<5.0 U	<5.0 U	
1,2-Dibromoethane (Ethylene Dibromide)	µg/L	0.0006	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<1.0 U	<1.0 U	<0.5 U	<0.5 U	<0.5 U	
1,2-Dichlorobenzene	µg/L	3.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
1,2-Dichloroethane	µg/L	0.6	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
1,2-Dichloropropene	µg/L	1.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
1,3,5-Trichlorobenzene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
1,3,5-Trimethylbenzene (Mesitylene)	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	10	<1.0 U	<2.0 U	<2.0 U	<1.0 U	3.2	<1.0 U	
1,3-Dichlorobenzene	µg/L	3.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
1,3-Dichloropropene	µg/L	5.0	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<1.0 U	<1.0 U	<0.5 U	<0.5 U	<0.5 U	
1,4-Dichlorobenzene	µg/L	3.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
1,4-Dioxane (P-Dioxane)	µg/L	1.0	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U	<100 U	<100 U	<50 U	<50 U	<50 U	
2,2-Dichloropropane	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
2-Chlorotoluene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
2-Hexanone	µg/L	50	<10 U	<10 U	<10 U	<10 U	<10 U	<10 U	<20 U	<20 U	<10 U	<10 U	<10 U	
4-Chlorotoluene	µg/L	4.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	1	<1.0 U	
Acetone	µg/L	5.0	<50 U	<50 U	<50 U	<50 U	<50 U	<50 U	<100 U	<100 U	<50 U	3.1 J	<50 U	
Acrylonitrile	µg/L	5.0	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<10 U	<10 U	<5.0 U	<5.0 U	<5.0 U	
Benzene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	0.29 J	<1.0 U	
Bromobenzene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
Bromochloromethane	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
Bromodichloromethane	µg/L	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<1.0 U	<1.0 U	<0.5 U	<0.5 U	<0.5 U	
Bromoform	µg/L	50	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
Bromomethane	µg/L	5.0	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<4.0 U	<4.0 U	<2.0 U	<2.0 U	<2.0 U	
Carbon Disulfide	µg/L	N/A	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<10 U	<10 U	<5.0 U	<5.0 U	<5.0 U	
Carbon Tetrachloride	µg/L	5.0	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<10 U	<10 U	<5.0 U	<5.0 U	<5.0 U	
Chlorobenzene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	
Chloroethane	µg/L	5.0	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<4.0 U	<4.0 U	<2.0 U	<2.0 U	<2.0 U	
Chloroform	µg/L	7.0	<2.0 U	<2.0 U	<2.0 U	<2.0 U	2.5	<2.0 U	0.35 J	<4.0 U	<4.0 U	<2.0 U	<2.0 U	
Cis-1,2-Dichloroethene	µg/L	5.0	<1.0 U	7.7	<1.0 U	<1.0 U	<1.0 U	14	0.54 JD	0.56 JD	3.4	8.2	<1.0 U	
Cis-1,3-Dichloropropene	µg/L	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<1.0 U	<1.0 U	<0.5 U	<0.5 U	<0.5 U	
Cymene	µg/L	N/A	<1.0 U	<1.0 U	<1.0 U	<1.0 U	0.91 J	<1.0 U	<2.0 U	<2.0 U	<1.0 U	0.81 J	<1.0 U	
Dibromochloromethane	µg/L	50	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<1.0 U	<1.0 U	<0.5 U	<0.5 U	<0.5 U	
Dibromomethane	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U	

Table C-1. Groundwater Analytical Results

Location ID	NYSDEC Class GA AWQS	MW-114A	MW-115A	MW-106A	MW-111	TW-07	TW-08	TW-10	TW-10	TW-09	TW-06	Trip Blank
Sample Name		442024-MW-114A	442024-MW-115A	442024-MW-106A	442024-MW-111	442024-TW-07	442024-TW-08	442024-TW-10	442024-FD-031622	442024-TW-09	442024-TW-06	442024-TB 20220316
Parent Sample ID									TW-10			
Sample Date		3/15/2022	3/15/2022	3/15/2022	3/15/2022	3/16/2022	3/16/2022	3/16/2022	3/16/2022	3/16/2022	3/16/2022	3/16/2022
Analyte	Unit	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
VOCs (E624.1 and EPA 524.2 / SOP DW-1)												
Dichlorodifluoromethane	µg/L	5.0	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<4.0 U	<4.0 U	<2.0 U	<2.0 U	<2.0 U
Diethyl Ether (Ethyl Ether)	µg/L	N/A	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<4.0 U	<4.0 U	<2.0 U	<2.0 U	<2.0 U
Ethyl Tert-Butyl Ether	µg/L	N/A	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<1.0 U	<1.0 U	<0.5 U	<0.5 U	<0.5 U
Ethylbenzene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	1.9	<1.0 U	<2.0 U	<1.0 U	0.33 J	<1.0 U
Hexachlorobutadiene	µg/L	0.5	<0.6 U	<0.6 U	<0.6 U	<0.6 U	<0.6 U	<1.2 U	<1.2 U	<0.6 U	<0.6 U	<0.6 U
Isopropyl Ether	µg/L	N/A	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<1.0 U	<1.0 U	<0.5 U	<0.5 U	<0.5 U
Isopropylbenzene (Cumene)	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	1.7	<1.0 U	<2.0 U	<2.0 U	<1.0 U	0.38 J
m,p-Xylene	µg/L	5.0	<2.0 U	<2.0 U	<2.0 U	<2.0 U	3.2	<2.0 U	<4.0 U	<4.0 U	<2.0 U	2.2
Methyl Acetate	µg/L	N/A	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U
Methyl Ethyl Ketone (2-Butanone)	µg/L	50	<20 U	<20 U	<20 U	<20 U	<20 U	<40 U	<40 U	<20 U	<20 U	<20 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	µg/L	N/A	<10 U	<10 U	<10 U	<10 U	<10 U	<20 U	<20 U	<10 U	<10 U	<10 U
Methylcyclohexane	µg/L	N/A	<1.0 U	<1.0 U	<1.0 U	43	<1.0 U	<2.0 U	<2.0 U	<1.0 U	32	<1.0 U
Methylene Chloride	µg/L	5.0	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<5.0 U	<10 U	<10 U	<5.0 U	<5.0 U	<5.0 U
Naphthalene	µg/L	10	<2.0 U	<2.0 U	<2.0 U	<2.0 U	1.3 J	<2.0 U	<4.0 U	<4.0 U	<2.0 U	<2.0 U
N-Butylbenzene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	1.9	<1.0 U	<2.0 U	<2.0 U	<1.0 U	0.68
N-Propylbenzene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	1.7	<1.0 U	<2.0 U	<2.0 U	<1.0 U	0.52
O-Xylene (1,2-Dimethylbenzene)	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	0.96 J	<1.0 U	<2.0 U	<2.0 U	<1.0 U	0.76
Sec-Butylbenzene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	0.68 J	<1.0 U	<2.0 U	<2.0 U	<1.0 U	0.16
Styrene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U
T-Butylbenzene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	0.27 J	<1.0 U	<2.0 U	<2.0 U	<1.0 U	0.14 J
Tert-Butyl Alcohol	µg/L	N/A	<20 U	<20 U	<20 U	<20 U	<20 U	<40 U	<40 U	<20 U	<20 U	<20 U
Tert-Butyl Methyl Ether	µg/L	N/A	0.32 J	0.26 J	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	1.6	<1.0 U
Tetrachloroethylene (PCE)	µg/L	5.0	<1.0 U	49	<1.0 U	2	0.37 J	11	190	180	89	17
Tetrahydrofuran	µg/L	50	<10 U	<10 U	<10 U	<10 U	<10 U	<20 U	<20 U	<10 U	<10 U	<10 U
Toluene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U
Trans-1,2-Dichloroethene	µg/L	5.0	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<1.0 U	<2.0 U	<2.0 U	<1.0 U	<1.0 U	<1.0 U
Trans-1,3-Dichloropropene	µg/L	0.4	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<0.5 U	<1.0 U	<1.0 U	<0.5 U	<0.5 U
Trans-1,4-Dichloro-2-Butene	µg/L	5.0	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<4.0 U	<4.0 U	<2.0 U	<2.0 U	<2.0 U
Trichloroethylene (TCE)	µg/L	5.0	<1.0 U	1.3	<1.0 U	<1.0 U	<1.0 U	1	1.3	1.4 JD	4.1	3.3
Trichlorofluoromethane	µg/L	5.0	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<4.0 U	<4.0 U	<2.0 U	<3.0 U	<2.0 U
Vinyl Chloride	µg/L	2.0	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<2.0 U	<4.0 U	<4.0 U	0.76 J	<2.0 U

Notes:

¹ Gray shaded results are detected values

² Red shaded results are COCs for the site

³ Bolded values exceed the GA NYS Ambient Water Quality Standards

⁴ NYSDEC AWQS are based on the Division of Water Technical and Operation Guidance Series June 1998 Memorandum

Table C-2. Air and Soil Vapor Analytical Results

Sample Name	IA-[REDACTED]20220316	OA-[REDACTED]20220316	SV-01_20220316	SV-04_20220316	SV-05_20220316	SV-[REDACTED]20220316	20220316	8094-SV-02-4422	0255-SV-03-4422
Parent Sample ID									
Sample Date	3/16/2022	3/16/2022	3/16/2022	3/16/2022	3/16/2022	3/16/2022	3/16/2022	4/4/2022	4/4/2022
Analyte	Unit	Result	Result	Result	Result	Result	Result	Result	Result
VOCs (TO15)									
1,1,1-Trichloroethane (TCA)	µg/m³	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.09 U	< 1.09 U
1,1,2,2-Tetrachloroethane	µg/m³	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.37 U	< 1.37 U
1,1,2-Trichloro-1,2,2-Trifluoroethane	µg/m³	0.51 JD	0.49 JD	< 6.1 U	< 6.1 U	< 6.1 U	< 6.1 U	N/A	N/A
1,1,2-Trichloroethane	µg/m³	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.09 U	< 1.09 U
1,1-Dichloroethane	µg/m³	< 0.81 U	< 0.81 U	< 0.81 U	< 0.81 U	< 0.81 U	< 0.81 U	< 0.802 U	< 0.802 U
1,1-Dichloroethene	µg/m³	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.793 U	< 0.793 U
1,2,4-Trichlorobenzene	µg/m³	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 3.0 U	< 4.66 U	< 4.66 U
1,2,4-Trimethylbenzene	µg/m³	6.3	0.28	< 0.98 U	< 0.98 U	< 0.98 U	6.5	6.48	5.60
1,2-Dibromoethane (Ethylene Dibromide)	µg/m³	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.5 U	< 1.54 U	< 1.54 U
1,2-Dichlorobenzene	µg/m³	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	< 1.20 U	< 1.20 U
1,2-Dichloroethane	µg/m³	< 0.81 U	< 0.81 U	< 0.81 U	< 0.81 U	< 0.81 U	< 0.81 U	< 0.81 U	< 0.81 U
1,2-Dichloropropane	µg/m³	0.16 JD	< 0.92 U	< 0.92 U	< 0.92 U	< 0.92 U	< 0.92 U	< 0.924 U	< 0.924 U
1,2-Dichlorotetrafluoroethane	µg/m³	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	N/A	N/A
1,3,5-Trimethylbenzene (Mesitylene)	µg/m³	1.3	< 0.98 U	1.2	0.77 JD	< 0.98 U	1.9	1.57	1.42
1,3-Butadiene	µg/m³	< 0.44 U	< 0.44 U	< 0.44 U	< 0.44 U	< 0.44 U	< 0.44 U	N/A	N/A
1,3-Dichlorobenzene	µg/m³	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	3.14	1.80
1,4-Dichlorobenzene	µg/m³	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	< 1.2 U	2.00	< 1.2 U
1,4-Dioxane (P-Dioxane)	µg/m³	< 7.2 U	< 7.2 U	< 7.2 U	< 7.2 U	< 7.2 U	< 7.2 U	< 0.721 U	< 0.721 U
2-Hexanone	µg/m³	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	< 1.6 U	N/A	N/A
4-Ethyltoluene	µg/m³	1.5	< 0.98 U	1.2	0.96 JD	< 0.98 U	1.8	N/A	N/A
Acetone	µg/m³	22	10	240	400	15 JD	550	N/A	N/A
Benzene	µg/m³	1.7	0.72	2.0	2.3	0.93	3.7	4.09	3.10
Benzyl Chloride	µg/m³	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.04 U	7.43
Bromodichloromethane	µg/m³	0.32	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.34 U	< 1.34 U
Bromoform	µg/m³	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 6.21 U	< 6.21 U
Bromomethane	µg/m³	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.78 U	< 0.776 U	< 0.776 U
Carbon Disulfide	µg/m³	1.6	0.61 JD	< 6.2 U	< 6.2 U	< 6.2 U	3.7 JD	N/A	N/A
Carbon Tetrachloride	µg/m³	0.54	0.46	< 1.3 U	< 1.3 U	< 1.3 U	< 1.3 U	< 1.26 U	< 1.26 U
Chlorobenzene	µg/m³	< 0.92 U	< 0.92 U	< 0.92 U	< 0.92 U	< 0.92 U	< 0.92 U	< 0.924 U	< 0.924 U
Chloroethane	µg/m³	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.53 U	< 0.528 U	< 0.528 U
Chloroform	µg/m³	1.6	< 0.98 U	< 0.98 U	< 0.98 U	< 0.98 U	1.4	< 0.973 U	1.06
Chloromethane	µg/m³	1.2	1.3	1.5	1.9	1.2	1.6	3.16	2.48
Cis-1,2-Dichloroethene	µg/m³	0.14	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.793 U	< 0.793 U
Cis-1,3-Dichloropropene	µg/m³	< 0.91 U	< 0.91 U	< 0.91 U	< 0.91 U	< 0.91 U	< 0.91 U	< 0.908 U	< 0.908 U

Table C-2. Air and Soil Vapor Analytical Results

Sample Name	IA-[REDACTED] 20220316	OA-[REDACTED] 20220316	SV-01_20220316	SV-04_20220316	SV-05_20220316	SV-[REDACTED] 20220316	8094-SV-02-4422	0255-SV-03-4422
Parent Sample ID								
Sample Date	3/16/2022	3/16/2022	3/16/2022	3/16/2022	3/16/2022	3/16/2022	4/4/2022	4/4/2022
Analyte	Unit	Result	Result	Result	Result	Result	Result	Result
VOCs (TO15)								
Cyclohexane	µg/m³	< 0.69 U	< 0.69 U	2.0	3.3	< 0.69 U	3.0	3.79
Dibromochloromethane	µg/m³	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.7 U	< 1.70 U	< 1.70 U
Dichlorodifluoromethane	µg/m³	2.4	2.0	2.2	2.1	2.3	2.4	1.76
Ethyl Acetate	µg/m³	< 7.2 U	< 7.2 U	< 7.2 U	3.9 JD	< 7.2 U	4.1 JD	N/A
Ethylbenzene	µg/m³	0.55	0.18	4.1	3.6	< 0.87 U	6.5	4.03
Hexachlorobutadiene	µg/m³	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 2.1 U	< 6.73 U
Isopropanol	µg/m³	< 20 U	1.2 JD	33	55	< 20 U	82	N/A
m,p-Xylene	µg/m³	2.2	0.49	14	12	< 1.7 U	24	14.3
Methyl Ethyl Ketone (2-Butanone)	µg/m³	2.2 JD	< 24 U	< 24 U	< 24 U	< 24 U	8.0 JD	< 5.13 U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	µg/m³	< 0.82 U	< 0.82 U	< 0.82 U	< 0.82 U	8.9	< 0.82 U	< 5.12 U
Methylene Chloride	µg/m³	0.82 JD	1.5	< 6.9 U	< 6.9 U	< 6.9 U	< 6.9 U	0.764
Naphthalene	µg/m³	0.24	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 1.0 U	< 3.30 U
N-Heptane	µg/m³	0.91	0.27	3.0	3.7	1.0	6.5	N/A
N-Hexane	µg/m³	< 28 U	< 28 U	< 28 U	< 28 U	< 28 U	< 28 U	9.17
O-Xylene (1,2-Dimethylbenzene)	µg/m³	2.3	0.28	5.6	5.0	< 0.87 U	9.0	5.85
Propylene	µg/m³	< 14 U	< 14 U	< 14 U	6.4 JD	< 14 U	< 14 U	N/A
Styrene	µg/m³	0.26	< 0.85 U	< 0.85 U	< 0.85 U	< 0.85 U	0.65 JD	< 0.851 U
Tert-Butyl Methyl Ether	µg/m³	< 0.72 U	< 0.72 U	< 0.72 U	< 0.72 U	< 0.72 U	< 0.72 U	< 0.721 U
Tetrachloroethylene (PCE)	µg/m³	5.5	< 1.4 U	< 1.4 U	< 1.4 U	< 1.4 U	2.3	0.917 J
Tetrahydrofuran	µg/m³	< 5.9 U	< 5.9 U	< 5.9 U	< 5.9 U	< 5.9 U	< 5.9 U	N/A
Toluene	µg/m³	1.7	1.6	23	23	2.2	34	20.3
Trans-1,2-Dichloroethene	µg/m³	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.79 U	< 0.793 U
Trans-1,3-Dichloropropene	µg/m³	< 0.91 U	< 0.91 U	< 0.91 U	< 0.91 U	< 0.91 U	< 0.91 U	< 0.908 U
Trichloroethylene (TCE)	µg/m³	1.1	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.1 U	< 1.07 U
Trichlorofluoromethane	µg/m³	4.4	1.1	< 4.5 U	< 4.5 U	< 4.5 U	3.8 JD	1.94
Vinyl Acetate	µg/m³	< 14 U	< 14 U	< 14 U	< 14 U	< 14 U	< 14 U	N/A
Vinyl Chloride	µg/m³	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	< 0.51 U	0.291 J

Notes:

J= The reported value is an estimate.

U = Analyte not detected above the reporting limit.

µg/m³ = Microgram(s) per cubic meter.

VOCs = volatile organic compounds

¹ Gray shaded results are detected values

² Red shaded results are COCs for the site

³ NYSDOH Ambient Air Guidelines and Immediate Action Levels apply to indoor air and outdoor air samples; New York currently does not have any standards, criteria, or guidance values for concentrations of compounds in sub-slab vapor. Guidelines and Action Levels are based on the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006, and NYSDOH Soil Vapor Intrusion Updates dated September 2013 and August 2015.

Appendix D

Laboratory Reports

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March 30, 2022

Chris Sanson
NYDEC_EA Engineering, Science & Tech. - NY
269 W. Jefferson Street
Syracuse, NY 13202

Project Location: Roxy Cleaners
Client Job Number:
Project Number: 442024
Laboratory Work Order Number: 22C1230

Enclosed are results of analyses for samples as received by the laboratory on March 18, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mike Buttrick
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

NYDEC_EA Engineering, Science & Tech. - NY
 269 W. Jefferson Street
 Syracuse, NY 13202
 ATTN: Chris Sanson

REPORT DATE: 3/30/2022

PURCHASE ORDER NUMBER: 142876

PROJECT NUMBER: 442024

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22C1230

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Roxy Cleaners

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
442024-MW-114A	22C1230-01	Ground Water		SW-846 8260D	
442024-MW-115A	22C1230-02	Ground Water		SW-846 8260D	
442024-MW-106A	22C1230-03	Ground Water		SW-846 8260D	
442024-MW-111	22C1230-04	Ground Water		SW-846 8260D	
442024-TW-07	22C1230-05	Ground Water		SW-846 8260D	
442024-TW-08	22C1230-06	Ground Water		SW-846 8260D	
442024-TW-10	22C1230-07	Ground Water		SW-846 8260D	
442024-TW-09	22C1230-08	Ground Water		SW-846 8260D	
442024-TW-06	22C1230-09	Ground Water		SW-846 8260D	
442024-FD-031622	22C1230-10	Ground Water		SW-846 8260D	
442024-TB	22C1230-11	Ground Water		SW-846 8260D	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

SW-846 8260D

Qualifications:

MS-15

Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.

Analyte & Samples(s) Qualified:

1,1,2-Trichloro-1,2,2-trifluoroethan

22C1230-01[442024-MW-114A], B303679-MS1, B303679-MSD1

Bromomethane

22C1230-01[442024-MW-114A], B303679-MS1, B303679-MSD1

Carbon Disulfide

22C1230-01[442024-MW-114A], B303679-MS1, B303679-MSD1

Chloroethane

22C1230-01[442024-MW-114A], B303679-MS1, B303679-MSD1

Tetrachloroethylene

22C1230-01[442024-MW-114A], B303679-MS1, B303679-MSD1

MS-24

Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.

Analyte & Samples(s) Qualified:

2-Hexanone (MBK)

B303679-MS1

Acetone

B303679-MS1

Chloromethane

B303679-MS1

Naphthalene

B303679-MS1

tert-Butyl Alcohol (TBA)

B303679-MS1

RL-11

Elevated reporting limit due to high concentration of target compounds.

Analyte & Samples(s) Qualified:

22C1230-07[442024-TW-10], 22C1230-10[442024-FD-031622]

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

Acetone

22C1230-01[442024-MW-114A], 22C1230-02[442024-MW-115A], 22C1230-03[442024-MW-106A], 22C1230-04[442024-MW-111], 22C1230-05[442024-TW-07],
22C1230-06[442024-TW-08], 22C1230-07[442024-TW-10], 22C1230-08[442024-TW-09], 22C1230-09[442024-TW-06], 22C1230-10[442024-FD-031622],
22C1230-11[442024-TB], B303679-BLK1, B303679-BS1, B303679-BSD1, B303679-MS1, B303679-MSD1, S069450-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-MW-114A

Sampled: 3/15/2022 13:42

Sample ID: 22C1230-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Bromomethane	ND	2.0	1.5	µg/L	1	MS-15	SW-846 8260D	3/21/22	3/22/22 0:29	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1	MS-15	SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Chloroethane	ND	2.0	0.32	µg/L	1	MS-15	SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-MW-114A

Sampled: 3/15/2022 13:42

Sample ID: 22C1230-01

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Methyl tert-Butyl Ether (MTBE)	0.32	1.0	0.17	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Naphthalene	ND	2.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1	MS-15	SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1	MS-15	SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:29	MFF
Surrogates	% Recovery	Recovery Limits			Flag/Qual					
1,2-Dichloroethane-d4	82.0	70-130						3/22/22 0:29		
Toluene-d8	94.6	70-130						3/22/22 0:29		
4-Bromofluorobenzene	93.8	70-130						3/22/22 0:29		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-MW-115A

Sampled: 3/15/2022 14:40

Sample ID: 22C1230-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
cis-1,2-Dichloroethylene	7.7	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-MW-115A

Sampled: 3/15/2022 14:40

Sample ID: 22C1230-02

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Methyl tert-Butyl Ether (MTBE)	0.26	1.0	0.17	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Naphthalene	ND	2.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Tetrachloroethylene	49	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Trichloroethylene	1.3	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:05	MFF
Surrogates	% Recovery	Recovery Limits			Flag/Qual					
1,2-Dichloroethane-d4	84.2	70-130						3/22/22 2:05		
Toluene-d8	93.0	70-130						3/22/22 2:05		
4-Bromofluorobenzene	92.0	70-130						3/22/22 2:05		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-MW-106A

Sampled: 3/15/2022 15:35

Sample ID: 22C1230-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-MW-106A

Sampled: 3/15/2022 15:35

Sample ID: 22C1230-03

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Naphthalene	ND	2.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 0:53	MFF
Surrogates		% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4		83.6	70-130							
Toluene-d8		94.1	70-130							
4-Bromofluorobenzene		92.9	70-130							

3/22/22 0:53
3/22/22 0:53
3/22/22 0:53

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-MW-111

Sampled: 3/15/2022 16:47

Sample ID: 22C1230-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Chloroform	2.5	2.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-MW-111

Sampled: 3/15/2022 16:47

Sample ID: 22C1230-04

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Naphthalene	ND	2.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Tetrachloroethylene	2.0	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:17	MFF
Surrogates		% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4		82.9	70-130						3/22/22 1:17	
Toluene-d8		93.4	70-130						3/22/22 1:17	
4-Bromofluorobenzene		90.8	70-130						3/22/22 1:17	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-TW-07

Sampled: 3/16/2022 08:54

Sample ID: 22C1230-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
n-Butylbenzene	1.9	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
sec-Butylbenzene	0.68	1.0	0.11	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:29	MFF
tert-Butylbenzene	0.27	1.0	0.13	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:29	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-TW-07

Sampled: 3/16/2022 08:54

Sample ID: 22C1230-05

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Ethylbenzene	1.9	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Isopropylbenzene (Cumene)	1.7	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
p-Isopropyltoluene (p-Cymene)	0.91	1.0	0.097	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Methyl Cyclohexane	43	1.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Naphthalene	1.3	2.0	0.24	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:29	MFF
n-Propylbenzene	1.7	1.0	0.086	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Tetrachloroethylene	0.37	1.0	0.19	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,2,4-Trimethylbenzene	19	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
1,3,5-Trimethylbenzene	10	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
m+p Xylene	3.2	2.0	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:29	MFF
o-Xylene	0.96	1.0	0.23	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:29	MFF
Surrogates		% Recovery	Recovery Limits	Flag/Qual						
1,2-Dichloroethane-d4		82.3	70-130						3/22/22 2:29	
Toluene-d8		93.5	70-130						3/22/22 2:29	
4-Bromofluorobenzene		96.6	70-130						3/22/22 2:29	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-TW-08

Sampled: 3/16/2022 09:38

Sample ID: 22C1230-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Chloroform	0.35	2.0	0.17	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
cis-1,2-Dichloroethylene	14	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-TW-08

Sampled: 3/16/2022 09:38

Sample ID: 22C1230-06

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Naphthalene	ND	2.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Tetrachloroethylene	11	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Trichloroethylene	1.0	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 1:41	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual						
1,2-Dichloroethane-d4	84.0	70-130							3/22/22 1:41	
Toluene-d8	92.4	70-130							3/22/22 1:41	
4-Bromofluorobenzene	93.4	70-130							3/22/22 1:41	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-TW-10

Sampled: 3/16/2022 10:54

Sample ID: 22C1230-07

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	4.1	µg/L	2	V-05	SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Acrylonitrile	ND	10	1.1	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
tert-Amyl Methyl Ether (TAME)	ND	1.0	0.29	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Benzene	ND	2.0	0.40	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Bromobenzene	ND	2.0	0.30	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Bromochloromethane	ND	2.0	0.61	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Bromodichloromethane	ND	1.0	0.36	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Bromoform	ND	2.0	0.77	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Bromomethane	ND	4.0	3.1	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
2-Butanone (MEK)	ND	40	3.2	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
tert-Butyl Alcohol (TBA)	ND	40	9.4	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
n-Butylbenzene	ND	2.0	0.30	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
sec-Butylbenzene	ND	2.0	0.22	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
tert-Butylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	0.30	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Carbon Disulfide	ND	10	2.9	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Carbon Tetrachloride	ND	10	0.33	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Chlorobenzene	ND	2.0	0.21	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Chlorodibromomethane	ND	1.0	0.44	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Chloroethane	ND	4.0	0.64	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Chloroform	ND	4.0	0.34	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Chloromethane	ND	4.0	1.0	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
2-Chlorotoluene	ND	2.0	0.23	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
4-Chlorotoluene	ND	2.0	0.24	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	1.6	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,2-Dibromoethane (EDB)	ND	1.0	0.34	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Dibromomethane	ND	2.0	0.71	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,2-Dichlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,3-Dichlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,4-Dichlorobenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
trans-1,4-Dichloro-2-butene	ND	4.0	3.2	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Dichlorodifluoromethane (Freon 12)	ND	4.0	0.38	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,1-Dichloroethane	ND	2.0	0.28	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,2-Dichloroethane	ND	2.0	0.62	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,1-Dichloroethylene	ND	2.0	0.28	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
cis-1,2-Dichloroethylene	0.54	2.0	0.29	µg/L	2	J	SW-846 8260D	3/21/22	3/22/22 3:41	MFF
trans-1,2-Dichloroethylene	ND	2.0	0.34	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,2-Dichloropropane	ND	2.0	0.36	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,3-Dichloropropane	ND	1.0	0.26	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
2,2-Dichloropropane	ND	2.0	0.65	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,1-Dichloropropene	ND	4.0	0.30	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
cis-1,3-Dichloropropene	ND	1.0	0.32	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
trans-1,3-Dichloropropene	ND	1.0	0.34	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Diethyl Ether	ND	4.0	0.36	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-TW-10

Sampled: 3/16/2022 10:54

Sample ID: 22C1230-07

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
								3/21/22	3/22/22 3:41	MFF
Diisopropyl Ether (DIPE)	ND	1.0	0.26	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,4-Dioxane	ND	100	41	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Ethylbenzene	ND	2.0	0.43	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Hexachlorobutadiene	ND	1.2	0.91	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
2-Hexanone (MBK)	ND	20	2.2	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Isopropylbenzene (Cumene)	ND	2.0	0.22	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
p-Isopropyltoluene (p-Cymene)	ND	2.0	0.19	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Methyl Acetate	ND	2.0	0.91	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Methyl tert-Butyl Ether (MTBE)	ND	2.0	0.34	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Methyl Cyclohexane	ND	2.0	0.49	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Methylene Chloride	ND	10	0.47	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
4-Methyl-2-pentanone (MIBK)	ND	20	2.6	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Naphthalene	ND	4.0	0.49	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
n-Propylbenzene	ND	2.0	0.17	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Styrene	ND	2.0	0.21	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,1,1,2-Tetrachloroethane	ND	2.0	0.36	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,1,2,2-Tetrachloroethane	ND	1.0	0.25	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Tetrachloroethylene	190	2.0	0.37	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Tetrahydrofuran	ND	20	0.98	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Toluene	ND	2.0	0.45	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,2,3-Trichlorobenzene	ND	10	0.61	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,2,4-Trichlorobenzene	ND	2.0	0.50	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,3,5-Trichlorobenzene	ND	2.0	0.42	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,1,1-Trichloroethane	ND	2.0	0.34	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,1,2-Trichloroethane	ND	2.0	0.37	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Trichloroethylene	1.3	2.0	0.38	µg/L	2	J	SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Trichlorofluoromethane (Freon 11)	ND	4.0	0.35	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,2,3-Trichloropropane	ND	4.0	0.56	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	2.0	0.45	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,2,4-Trimethylbenzene	ND	2.0	0.40	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
1,3,5-Trimethylbenzene	ND	2.0	0.23	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Vinyl Chloride	ND	4.0	0.42	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
m+p Xylene	ND	4.0	0.92	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
o-Xylene	ND	2.0	0.46	µg/L	2		SW-846 8260D	3/21/22	3/22/22 3:41	MFF
Surrogates	% Recovery	Recovery Limits			Flag/Qual					
1,2-Dichloroethane-d4	83.2	70-130								3/22/22 3:41
Toluene-d8	93.3	70-130								3/22/22 3:41
4-Bromofluorobenzene	90.4	70-130								3/22/22 3:41

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-TW-09

Sampled: 3/16/2022 11:46

Sample ID: 22C1230-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
cis-1,2-Dichloroethylene	3.4	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-TW-09

Sampled: 3/16/2022 11:46

Sample ID: 22C1230-08

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Naphthalene	ND	2.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Tetrachloroethylene	89	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Trichloroethylene	4.1	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 3:17	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual						
1,2-Dichloroethane-d4	82.1	70-130								3/22/22 3:17
Toluene-d8	95.4	70-130								3/22/22 3:17
4-Bromofluorobenzene	94.8	70-130								3/22/22 3:17

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-TW-06

Sampled: 3/16/2022 12:25

Sample ID: 22C1230-09

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	3.1	50	2.0	µg/L	1	V-05, J	SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
tert-Amyl Methyl Ether (TAME)	0.75	0.50	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Benzene	0.29	1.0	0.20	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
n-Butylbenzene	0.68	1.0	0.15	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:53	MFF
sec-Butylbenzene	0.16	1.0	0.11	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:53	MFF
tert-Butylbenzene	0.14	1.0	0.13	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:53	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
cis-1,2-Dichloroethylene	8.2	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-TW-06

Sampled: 3/16/2022 12:25

Sample ID: 22C1230-09

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Ethylbenzene	0.33	1.0	0.21	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Isopropylbenzene (Cumene)	0.38	1.0	0.11	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:53	MFF
p-Isopropyltoluene (p-Cymene)	0.81	1.0	0.097	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Methyl tert-Butyl Ether (MTBE)	1.6	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Methyl Cyclohexane	32	1.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Naphthalene	ND	2.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
n-Propylbenzene	0.52	1.0	0.086	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Tetrachloroethylene	17	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Trichloroethylene	3.3	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,2,4-Trimethylbenzene	8.9	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
1,3,5-Trimethylbenzene	3.2	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Vinyl Chloride	0.76	2.0	0.21	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:53	MFF
m+p Xylene	2.2	2.0	0.46	µg/L	1		SW-846 8260D	3/21/22	3/22/22 2:53	MFF
o-Xylene	0.76	1.0	0.23	µg/L	1	J	SW-846 8260D	3/21/22	3/22/22 2:53	MFF
Surrogates	% Recovery	Recovery Limits			Flag/Qual					
1,2-Dichloroethane-d4	80.8	70-130						3/22/22 2:53		
Toluene-d8	94.6	70-130						3/22/22 2:53		
4-Bromofluorobenzene	97.6	70-130						3/22/22 2:53		

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-FD-031622

Sampled: 3/16/2022 00:00

Sample ID: 22C1230-10

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	100	4.1	µg/L	2	V-05	SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Acrylonitrile	ND	10	1.1	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
tert-Amyl Methyl Ether (TAME)	ND	1.0	0.29	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Benzene	ND	2.0	0.40	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Bromobenzene	ND	2.0	0.30	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Bromochloromethane	ND	2.0	0.61	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Bromodichloromethane	ND	1.0	0.36	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Bromoform	ND	2.0	0.77	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Bromomethane	ND	4.0	3.1	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
2-Butanone (MEK)	ND	40	3.2	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
tert-Butyl Alcohol (TBA)	ND	40	9.4	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
n-Butylbenzene	ND	2.0	0.30	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
sec-Butylbenzene	ND	2.0	0.22	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
tert-Butylbenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	1.0	0.30	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Carbon Disulfide	ND	10	2.9	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Carbon Tetrachloride	ND	10	0.33	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Chlorobenzene	ND	2.0	0.21	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Chlorodibromomethane	ND	1.0	0.44	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Chloroethane	ND	4.0	0.64	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Chloroform	ND	4.0	0.34	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Chloromethane	ND	4.0	1.0	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
2-Chlorotoluene	ND	2.0	0.23	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
4-Chlorotoluene	ND	2.0	0.24	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	10	1.6	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
1,2-Dibromoethane (EDB)	ND	1.0	0.34	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Dibromomethane	ND	2.0	0.71	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
1,2-Dichlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
1,3-Dichlorobenzene	ND	2.0	0.24	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
1,4-Dichlorobenzene	ND	2.0	0.26	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
trans-1,4-Dichloro-2-butene	ND	4.0	3.2	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Dichlorodifluoromethane (Freon 12)	ND	4.0	0.38	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
1,1-Dichloroethane	ND	2.0	0.28	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
1,2-Dichloroethane	ND	2.0	0.62	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
1,1-Dichloroethylene	ND	2.0	0.28	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
cis-1,2-Dichloroethylene	0.56	2.0	0.29	µg/L	2	J	SW-846 8260D	3/21/22	3/22/22 4:05	MFF
trans-1,2-Dichloroethylene	ND	2.0	0.34	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
1,2-Dichloropropane	ND	2.0	0.36	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
1,3-Dichloropropane	ND	1.0	0.26	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
2,2-Dichloropropane	ND	2.0	0.65	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
1,1-Dichloropropene	ND	4.0	0.30	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
cis-1,3-Dichloropropene	ND	1.0	0.32	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
trans-1,3-Dichloropropene	ND	1.0	0.34	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF
Diethyl Ether	ND	4.0	0.36	µg/L	2		SW-846 8260D	3/21/22	3/22/22 4:05	MFF



39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Field Sample #: 442024-FD-031622

Sampled: 3/16/2022 00:00

Sample ID: 22C1230-10

Sample Matrix: Ground Water

Sample Flags: RL-11

Volatile Organic Compounds by GC/MS

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Sampled: 3/16/2022 00:00

Field Sample #: 442024-TB

Sample ID: 22C1230-11

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1	V-05	SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Acrylonitrile	ND	5.0	0.55	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
tert-Amyl Methyl Ether (TAME)	ND	0.50	0.14	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Benzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Bromobenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Bromochloromethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Bromodichloromethane	ND	0.50	0.18	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Bromoform	ND	1.0	0.38	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Bromomethane	ND	2.0	1.5	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
2-Butanone (MEK)	ND	20	1.6	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
tert-Butyl Alcohol (TBA)	ND	20	4.7	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
n-Butylbenzene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
sec-Butylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
tert-Butylbenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	0.15	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Carbon Disulfide	ND	5.0	1.4	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Chlorobenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Chlorodibromomethane	ND	0.50	0.22	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Chloroethane	ND	2.0	0.32	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Chloroform	ND	2.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Chloromethane	ND	2.0	0.52	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
2-Chlorotoluene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
4-Chlorotoluene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.80	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Dibromomethane	ND	1.0	0.35	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,2-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,3-Dichlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
trans-1,4-Dichloro-2-butene	ND	2.0	1.6	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,2-Dichloroethane	ND	1.0	0.31	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,2-Dichloropropane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,3-Dichloropropane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
2,2-Dichloropropane	ND	1.0	0.33	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,1-Dichloropropene	ND	2.0	0.15	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
trans-1,3-Dichloropropene	ND	0.50	0.17	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Diethyl Ether	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Roxy Cleaners

Sample Description:

Work Order: 22C1230

Date Received: 3/18/2022

Sampled: 3/16/2022 00:00

Field Sample #: 442024-TB

Sample ID: 22C1230-11

Sample Matrix: Ground Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Diisopropyl Ether (DIPE)	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,4-Dioxane	ND	50	21	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Ethylbenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Hexachlorobutadiene	ND	0.60	0.46	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
2-Hexanone (MBK)	ND	10	1.1	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
p-Isopropyltoluene (p-Cymene)	ND	1.0	0.097	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Methyl Acetate	ND	1.0	0.45	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Methyl Cyclohexane	ND	1.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Methylene Chloride	ND	5.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Naphthalene	ND	2.0	0.24	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
n-Propylbenzene	ND	1.0	0.086	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Styrene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,1,1,2-Tetrachloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.13	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Tetrachloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Tetrahydrofuran	ND	10	0.49	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.30	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.25	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,3,5-Trichlorobenzene	ND	1.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,1,1-Trichloroethane	ND	1.0	0.17	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,1,2-Trichloroethane	ND	1.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Trichloroethylene	ND	1.0	0.19	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.18	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,2,3-Trichloropropane	ND	2.0	0.28	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,2,4-Trimethylbenzene	ND	1.0	0.20	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
1,3,5-Trimethylbenzene	ND	1.0	0.11	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Vinyl Chloride	ND	2.0	0.21	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
m+p Xylene	ND	2.0	0.46	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
o-Xylene	ND	1.0	0.23	µg/L	1		SW-846 8260D	3/21/22	3/21/22 23:41	MFF
Surrogates	% Recovery	Recovery Limits		Flag/Qual						
1,2-Dichloroethane-d4	82.5	70-130								3/21/22 23:41
Toluene-d8	93.2	70-130								3/21/22 23:41
4-Bromofluorobenzene	93.3	70-130								3/21/22 23:41

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Sample Extraction Data

Prep Method: SW-846 5030B Analytical Method: SW-846 8260D

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
22C1230-01 [442024-MW-114A]	B303679	5	5.00	03/21/22
22C1230-02 [442024-MW-115A]	B303679	5	5.00	03/21/22
22C1230-03 [442024-MW-106A]	B303679	5	5.00	03/21/22
22C1230-04 [442024-MW-111]	B303679	5	5.00	03/21/22
22C1230-05 [442024-TW-07]	B303679	5	5.00	03/21/22
22C1230-06 [442024-TW-08]	B303679	5	5.00	03/21/22
22C1230-07 [442024-TW-10]	B303679	2.5	5.00	03/21/22
22C1230-08 [442024-TW-09]	B303679	5	5.00	03/21/22
22C1230-09 [442024-TW-06]	B303679	5	5.00	03/21/22
22C1230-10 [442024-FD-031622]	B303679	2.5	5.00	03/21/22
22C1230-11 [442024-TB]	B303679	5	5.00	03/21/22

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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Batch B303679 - SW-846 5030B

Blank (B303679-BLK1)		Prepared & Analyzed: 03/21/22								
Acetone	ND	50	µg/L							V-05
Acrylonitrile	ND	5.0	µg/L							
tert-Amyl Methyl Ether (TAME)	ND	0.50	µg/L							
Benzene	ND	1.0	µg/L							
Bromobenzene	ND	1.0	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
tert-Butyl Alcohol (TBA)	ND	20	µg/L							
n-Butylbenzene	ND	1.0	µg/L							
sec-Butylbenzene	ND	1.0	µg/L							
tert-Butylbenzene	ND	1.0	µg/L							
tert-Butyl Ethyl Ether (TBEE)	ND	0.50	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
2-Chlorotoluene	ND	1.0	µg/L							
4-Chlorotoluene	ND	1.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
Dibromomethane	ND	1.0	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
trans-1,4-Dichloro-2-butene	ND	2.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
1,3-Dichloropropane	ND	0.50	µg/L							
2,2-Dichloropropane	ND	1.0	µg/L							
1,1-Dichloropropene	ND	2.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
Diethyl Ether	ND	2.0	µg/L							
Diisopropyl Ether (DIPE)	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
Hexachlorobutadiene	ND	0.60	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
p-Isopropyltoluene (p-Cymene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Notes
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Batch B303679 - SW-846 5030B

Blank (B303679-BLK1)	Prepared & Analyzed: 03/21/22								
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L						
Methyl Cyclohexane	ND	1.0	µg/L						
Methylene Chloride	ND	5.0	µg/L						
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L						
Naphthalene	ND	2.0	µg/L						
n-Propylbenzene	ND	1.0	µg/L						
Styrene	ND	1.0	µg/L						
1,1,1,2-Tetrachloroethane	ND	1.0	µg/L						
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L						
Tetrachloroethylene	ND	1.0	µg/L						
Tetrahydrofuran	ND	10	µg/L						
Toluene	ND	1.0	µg/L						
1,2,3-Trichlorobenzene	ND	5.0	µg/L						
1,2,4-Trichlorobenzene	ND	1.0	µg/L						
1,3,5-Trichlorobenzene	ND	1.0	µg/L						
1,1,1-Trichloroethane	ND	1.0	µg/L						
1,1,2-Trichloroethane	ND	1.0	µg/L						
Trichloroethylene	ND	1.0	µg/L						
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L						
1,2,3-Trichloropropane	ND	2.0	µg/L						
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L						
1,2,4-Trimethylbenzene	ND	1.0	µg/L						
1,3,5-Trimethylbenzene	ND	1.0	µg/L						
Vinyl Chloride	ND	2.0	µg/L						
m+p Xylene	ND	2.0	µg/L						
o-Xylene	ND	1.0	µg/L						
Surrogate: 1,2-Dichloroethane-d4	20.5		µg/L	25.0	81.9	70-130			
Surrogate: Toluene-d8	23.2		µg/L	25.0	92.8	70-130			
Surrogate: 4-Bromofluorobenzene	23.3		µg/L	25.0	93.1	70-130			

LCS (B303679-BS1)	Prepared & Analyzed: 03/21/22								
Acetone	84.0	50	µg/L	100	84.0	70-160		V-05	†
Acrylonitrile	9.73	5.0	µg/L	10.0	97.3	70-130			
tert-Amyl Methyl Ether (TAME)	11.8	0.50	µg/L	10.0	118	70-130			
Benzene	11.4	1.0	µg/L	10.0	114	70-130			
Bromobenzene	10.6	1.0	µg/L	10.0	106	70-130			
Bromoform	10.7	1.0	µg/L	10.0	107	70-130			
Bromochloromethane	10.7	0.50	µg/L	10.0	107	70-130			
Bromodichloromethane	10.7	0.50	µg/L	10.0	107	70-130			
Bromoform	10.8	1.0	µg/L	10.0	108	70-130			
Bromomethane	11.8	2.0	µg/L	10.0	118	40-160			†
2-Butanone (MEK)	90.9	20	µg/L	100	90.9	40-160			†
tert-Butyl Alcohol (TBA)	93.1	20	µg/L	100	93.1	40-160			†
n-Butylbenzene	9.52	1.0	µg/L	10.0	95.2	70-130			
sec-Butylbenzene	10.7	1.0	µg/L	10.0	107	70-130			
tert-Butylbenzene	11.1	1.0	µg/L	10.0	111	70-130			
tert-Butyl Ethyl Ether (TBEE)	10.9	0.50	µg/L	10.0	109	70-130			
Carbon Disulfide	119	5.0	µg/L	100	119	70-130			
Carbon Tetrachloride	11.1	5.0	µg/L	10.0	111	70-130			
Chlorobenzene	11.9	1.0	µg/L	10.0	119	70-130			
Chlorodibromomethane	11.0	0.50	µg/L	10.0	110	70-130			
Chloroethane	12.4	2.0	µg/L	10.0	124	70-130			
Chloroform	11.0	2.0	µg/L	10.0	110	70-130			

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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Batch B303679 - SW-846 5030B

LCS (B303679-BS1)	Prepared & Analyzed: 03/21/22						
Chloromethane	10.9	2.0	µg/L	10.0	109	40-160	†
2-Chlorotoluene	10.9	1.0	µg/L	10.0	109	70-130	
4-Chlorotoluene	10.8	1.0	µg/L	10.0	108	70-130	
1,2-Dibromo-3-chloropropane (DBCP)	9.13	5.0	µg/L	10.0	91.3	70-130	
1,2-Dibromoethane (EDB)	10.7	0.50	µg/L	10.0	107	70-130	
Dibromomethane	10.5	1.0	µg/L	10.0	105	70-130	
1,2-Dichlorobenzene	11.3	1.0	µg/L	10.0	113	70-130	
1,3-Dichlorobenzene	11.1	1.0	µg/L	10.0	111	70-130	
1,4-Dichlorobenzene	10.6	1.0	µg/L	10.0	106	70-130	
trans-1,4-Dichloro-2-butene	9.58	2.0	µg/L	10.0	95.8	70-130	
Dichlorodifluoromethane (Freon 12)	9.78	2.0	µg/L	10.0	97.8	40-160	†
1,1-Dichloroethane	10.6	1.0	µg/L	10.0	106	70-130	
1,2-Dichloroethane	9.52	1.0	µg/L	10.0	95.2	70-130	
1,1-Dichloroethylene	10.6	1.0	µg/L	10.0	106	70-130	
cis-1,2-Dichloroethylene	10.6	1.0	µg/L	10.0	106	70-130	
trans-1,2-Dichloroethylene	10.8	1.0	µg/L	10.0	108	70-130	
1,2-Dichloropropane	10.8	1.0	µg/L	10.0	108	70-130	
1,3-Dichloropropane	10.6	0.50	µg/L	10.0	106	70-130	
2,2-Dichloropropane	8.66	1.0	µg/L	10.0	86.6	40-130	†
1,1-Dichloropropene	10.7	2.0	µg/L	10.0	107	70-130	
cis-1,3-Dichloropropene	10.2	0.50	µg/L	10.0	102	70-130	
trans-1,3-Dichloropropene	9.42	0.50	µg/L	10.0	94.2	70-130	
Diethyl Ether	10.3	2.0	µg/L	10.0	103	70-130	
Diisopropyl Ether (DIPE)	10.2	0.50	µg/L	10.0	102	70-130	
1,4-Dioxane	97.1	50	µg/L	100	97.1	40-130	†
Ethylbenzene	11.4	1.0	µg/L	10.0	114	70-130	
Hexachlorobutadiene	10.0	0.60	µg/L	10.0	100	70-130	
2-Hexanone (MBK)	88.4	10	µg/L	100	88.4	70-160	†
Isopropylbenzene (Cumene)	11.9	1.0	µg/L	10.0	119	70-130	
p-Isopropyltoluene (p-Cymene)	10.8	1.0	µg/L	10.0	108	70-130	
Methyl Acetate	10.9	1.0	µg/L	10.0	109	70-130	
Methyl tert-Butyl Ether (MTBE)	11.5	1.0	µg/L	10.0	115	70-130	
Methyl Cyclohexane	10.5	1.0	µg/L	10.0	105	70-130	
Methylene Chloride	9.86	5.0	µg/L	10.0	98.6	70-130	
4-Methyl-2-pentanone (MIBK)	93.3	10	µg/L	100	93.3	70-160	†
Naphthalene	8.99	2.0	µg/L	10.0	89.9	40-130	†
n-Propylbenzene	11.0	1.0	µg/L	10.0	110	70-130	
Styrene	11.9	1.0	µg/L	10.0	119	70-130	
1,1,1,2-Tetrachloroethane	11.6	1.0	µg/L	10.0	116	70-130	
1,1,2,2-Tetrachloroethane	10.6	0.50	µg/L	10.0	106	70-130	
Tetrachloroethylene	11.7	1.0	µg/L	10.0	117	70-130	
Tetrahydrofuran	10.4	10	µg/L	10.0	104	70-130	
Toluene	11.6	1.0	µg/L	10.0	116	70-130	
1,2,3-Trichlorobenzene	9.28	5.0	µg/L	10.0	92.8	70-130	
1,2,4-Trichlorobenzene	9.47	1.0	µg/L	10.0	94.7	70-130	
1,3,5-Trichlorobenzene	9.90	1.0	µg/L	10.0	99.0	70-130	
1,1,1-Trichloroethane	11.0	1.0	µg/L	10.0	110	70-130	
1,1,2-Trichloroethane	11.0	1.0	µg/L	10.0	110	70-130	
Trichloroethylene	11.4	1.0	µg/L	10.0	114	70-130	
Trichlorofluoromethane (Freon 11)	10.6	2.0	µg/L	10.0	106	70-130	
1,2,3-Trichloropropane	10.3	2.0	µg/L	10.0	103	70-130	

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
Batch B303679 - SW-846 5030B									
LCS (B303679-BS1)									
Prepared & Analyzed: 03/21/22									
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.9	1.0	µg/L	10.0	119	70-130			
1,2,4-Trimethylbenzene	10.8	1.0	µg/L	10.0	108	70-130			
1,3,5-Trimethylbenzene	11.2	1.0	µg/L	10.0	112	70-130			
Vinyl Chloride	11.2	2.0	µg/L	10.0	112	40-160			†
m+p Xylene	22.6	2.0	µg/L	20.0	113	70-130			
o-Xylene	11.6	1.0	µg/L	10.0	116	70-130			
Surrogate: 1,2-Dichloroethane-d4	20.5		µg/L	25.0	81.9	70-130			
Surrogate: Toluene-d8	23.6		µg/L	25.0	94.4	70-130			
Surrogate: 4-Bromofluorobenzene	23.4		µg/L	25.0	93.4	70-130			
LCS Dup (B303679-BSD1)									
Prepared & Analyzed: 03/21/22									
Acetone	78.4	50	µg/L	100	78.4	70-160	6.91	25	V-05
Acrylonitrile	8.75	5.0	µg/L	10.0	87.5	70-130	10.6	25	
tert-Amyl Methyl Ether (TAME)	11.5	0.50	µg/L	10.0	115	70-130	2.66	25	
Benzene	11.5	1.0	µg/L	10.0	115	70-130	0.875	25	
Bromobenzene	10.6	1.0	µg/L	10.0	106	70-130	0.472	25	
Bromoform	10.9	1.0	µg/L	10.0	109	70-130	1.67	25	
Bromochloromethane	10.8	0.50	µg/L	10.0	108	70-130	0.834	25	
Bromodichloromethane	10.7	1.0	µg/L	10.0	107	70-130	1.03	25	
Bromomethane	13.6	2.0	µg/L	10.0	136	40-160	14.2	25	†
2-Butanone (MEK)	84.6	20	µg/L	100	84.6	40-160	7.15	25	†
tert-Butyl Alcohol (TBA)	85.6	20	µg/L	100	85.6	40-160	8.30	25	†
n-Butylbenzene	9.62	1.0	µg/L	10.0	96.2	70-130	1.04	25	
sec-Butylbenzene	10.9	1.0	µg/L	10.0	109	70-130	1.48	25	
tert-Butylbenzene	11.1	1.0	µg/L	10.0	111	70-130	0.180	25	
tert-Butyl Ethyl Ether (TBEE)	10.6	0.50	µg/L	10.0	106	70-130	2.79	25	
Carbon Disulfide	119	5.0	µg/L	100	119	70-130	0.488	25	
Carbon Tetrachloride	11.5	5.0	µg/L	10.0	115	70-130	3.18	25	
Chlorobenzene	11.7	1.0	µg/L	10.0	117	70-130	1.69	25	
Chlorodibromomethane	11.0	0.50	µg/L	10.0	110	70-130	0.819	25	
Chloroethane	12.6	2.0	µg/L	10.0	126	70-130	1.76	25	
Chloroform	10.8	2.0	µg/L	10.0	108	70-130	1.93	25	
Chloromethane	10.9	2.0	µg/L	10.0	109	40-160	0.0920	25	†
2-Chlorotoluene	11.1	1.0	µg/L	10.0	111	70-130	2.27	25	
4-Chlorotoluene	10.8	1.0	µg/L	10.0	108	70-130	0.185	25	
1,2-Dibromo-3-chloropropane (DBCP)	8.70	5.0	µg/L	10.0	87.0	70-130	4.82	25	
1,2-Dibromoethane (EDB)	10.7	0.50	µg/L	10.0	107	70-130	0.373	25	
Dibromomethane	10.6	1.0	µg/L	10.0	106	70-130	0.850	25	
1,2-Dichlorobenzene	11.5	1.0	µg/L	10.0	115	70-130	1.84	25	
1,3-Dichlorobenzene	11.3	1.0	µg/L	10.0	113	70-130	1.07	25	
1,4-Dichlorobenzene	10.7	1.0	µg/L	10.0	107	70-130	1.04	25	
trans-1,4-Dichloro-2-butene	9.04	2.0	µg/L	10.0	90.4	70-130	5.80	25	
Dichlorodifluoromethane (Freon 12)	9.92	2.0	µg/L	10.0	99.2	40-160	1.42	25	†
1,1-Dichloroethane	10.5	1.0	µg/L	10.0	105	70-130	1.33	25	
1,2-Dichloroethane	9.76	1.0	µg/L	10.0	97.6	70-130	2.49	25	
1,1-Dichloroethylene	10.9	1.0	µg/L	10.0	109	70-130	2.79	25	
cis-1,2-Dichloroethylene	10.7	1.0	µg/L	10.0	107	70-130	0.940	25	
trans-1,2-Dichloroethylene	10.5	1.0	µg/L	10.0	105	70-130	2.63	25	
1,2-Dichloropropane	10.8	1.0	µg/L	10.0	108	70-130	0.0922	25	
1,3-Dichloropropane	10.8	0.50	µg/L	10.0	108	70-130	1.69	25	
2,2-Dichloropropane	8.53	1.0	µg/L	10.0	85.3	40-130	1.51	25	†
1,1-Dichloropropene	10.9	2.0	µg/L	10.0	109	70-130	1.85	25	

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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Batch B303679 - SW-846 5030B

LCS Dup (B303679-BSD1)	Prepared & Analyzed: 03/21/22							
cis-1,3-Dichloropropene	10.3	0.50	µg/L	10.0	103	70-130	0.585	25
trans-1,3-Dichloropropene	9.59	0.50	µg/L	10.0	95.9	70-130	1.79	25
Diethyl Ether	10.3	2.0	µg/L	10.0	103	70-130	0.194	25
Diisopropyl Ether (DIPE)	10.1	0.50	µg/L	10.0	101	70-130	0.494	25
1,4-Dioxane	92.3	50	µg/L	100	92.3	40-130	4.99	50
Ethylbenzene	11.4	1.0	µg/L	10.0	114	70-130	0.264	25
Hexachlorobutadiene	10.2	0.60	µg/L	10.0	102	70-130	2.27	25
2-Hexanone (MBK)	82.2	10	µg/L	100	82.2	70-160	7.21	25
Isopropylbenzene (Cumene)	11.8	1.0	µg/L	10.0	118	70-130	1.10	25
p-Isopropyltoluene (p-Cymene)	10.8	1.0	µg/L	10.0	108	70-130	0.278	25
Methyl Acetate	10.4	1.0	µg/L	10.0	104	70-130	4.32	25
Methyl tert-Butyl Ether (MTBE)	11.1	1.0	µg/L	10.0	111	70-130	3.36	25
Methyl Cyclohexane	10.8	1.0	µg/L	10.0	108	70-130	3.20	25
Methylene Chloride	9.98	5.0	µg/L	10.0	99.8	70-130	1.21	25
4-Methyl-2-pentanone (MIBK)	88.2	10	µg/L	100	88.2	70-160	5.62	25
Naphthalene	8.49	2.0	µg/L	10.0	84.9	40-130	5.72	25
n-Propylbenzene	11.0	1.0	µg/L	10.0	110	70-130	0.545	25
Styrene	12.1	1.0	µg/L	10.0	121	70-130	1.25	25
1,1,1,2-Tetrachloroethane	11.7	1.0	µg/L	10.0	117	70-130	0.944	25
1,1,2,2-Tetrachloroethane	10.2	0.50	µg/L	10.0	102	70-130	3.64	25
Tetrachloroethylene	11.8	1.0	µg/L	10.0	118	70-130	0.939	25
Tetrahydrofuran	9.66	10	µg/L	10.0	96.6	70-130	7.28	25
Toluene	11.8	1.0	µg/L	10.0	118	70-130	1.28	25
1,2,3-Trichlorobenzene	9.55	5.0	µg/L	10.0	95.5	70-130	2.87	25
1,2,4-Trichlorobenzene	9.57	1.0	µg/L	10.0	95.7	70-130	1.05	25
1,3,5-Trichlorobenzene	10.3	1.0	µg/L	10.0	103	70-130	3.67	25
1,1,1-Trichloroethane	11.2	1.0	µg/L	10.0	112	70-130	1.71	25
1,1,2-Trichloroethane	11.0	1.0	µg/L	10.0	110	70-130	0.273	25
Trichloroethylene	11.7	1.0	µg/L	10.0	117	70-130	2.08	25
Trichlorofluoromethane (Freon 11)	10.6	2.0	µg/L	10.0	106	70-130	0.00	25
1,2,3-Trichloropropane	9.26	2.0	µg/L	10.0	92.6	70-130	10.2	25
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	12.3	1.0	µg/L	10.0	123	70-130	3.39	25
1,2,4-Trimethylbenzene	11.0	1.0	µg/L	10.0	110	70-130	1.83	25
1,3,5-Trimethylbenzene	11.4	1.0	µg/L	10.0	114	70-130	0.973	25
Vinyl Chloride	11.4	2.0	µg/L	10.0	114	40-160	1.15	25
m+p Xylene	22.7	2.0	µg/L	20.0	114	70-130	0.353	25
o-Xylene	11.7	1.0	µg/L	10.0	117	70-130	1.37	25
Surrogate: 1,2-Dichloroethane-d4	20.7		µg/L	25.0	82.6	70-130		
Surrogate: Toluene-d8	23.8		µg/L	25.0	95.1	70-130		
Surrogate: 4-Bromofluorobenzene	23.5		µg/L	25.0	93.9	70-130		

Matrix Spike (B303679-MS1)	Source: 22C1230-01	Prepared: 03/21/22 Analyzed: 03/22/22						
Acetone	68.7	50	µg/L	100	ND	68.7	*	70-130 MS-24, V-05
Acrylonitrile	7.83	5.0	µg/L	10.0	ND	78.3		70-130
tert-Amyl Methyl Ether (TAME)	11.4	0.50	µg/L	10.0	ND	114		70-130
Benzene	11.9	1.0	µg/L	10.0	ND	119		70-130
Bromobenzene	10.4	1.0	µg/L	10.0	ND	104		70-130
Bromochloromethane	11.1	1.0	µg/L	10.0	ND	111		70-130
Bromoform	9.76	1.0	µg/L	10.0	ND	97.6		70-130
Bromomethane	13.5	2.0	µg/L	10.0	ND	135	*	70-130 MS-15
2-Butanone (MEK)	71.3	20	µg/L	100	ND	71.3		70-130

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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Batch B303679 - SW-846 5030B

Matrix Spike (B303679-MS1)	Source: 22C1230-01			Prepared: 03/21/22 Analyzed: 03/22/22					
tert-Butyl Alcohol (TBA)	68.4	20	µg/L	100	ND	68.4	*	70-130	MS-24
n-Butylbenzene	10.7	1.0	µg/L	10.0	ND	107		70-130	
sec-Butylbenzene	12.1	1.0	µg/L	10.0	ND	121		70-130	
tert-Butylbenzene	12.3	1.0	µg/L	10.0	ND	123		70-130	
tert-Butyl Ethyl Ether (TBEE)	10.7	0.50	µg/L	10.0	ND	107		70-130	
Carbon Disulfide	131	5.0	µg/L	100	ND	131	*	70-130	MS-15
Carbon Tetrachloride	12.4	5.0	µg/L	10.0	ND	124		70-130	
Chlorobenzene	12.2	1.0	µg/L	10.0	ND	122		70-130	
Chlorodibromomethane	10.7	0.50	µg/L	10.0	ND	107		70-130	
Chloroethane	13.9	2.0	µg/L	10.0	ND	139	*	70-130	MS-15
Chloroform	11.3	2.0	µg/L	10.0	ND	113		70-130	
Chloromethane	13.2	2.0	µg/L	10.0	ND	132	*	70-130	MS-24
2-Chlorotoluene	11.8	1.0	µg/L	10.0	ND	118		70-130	
4-Chlorotoluene	11.3	1.0	µg/L	10.0	ND	113		70-130	
1,2-Dibromo-3-chloropropane (DBCP)	7.17	5.0	µg/L	10.0	ND	71.7		70-130	
1,2-Dibromoethane (EDB)	9.96	0.50	µg/L	10.0	ND	99.6		70-130	
Dibromomethane	10.2	1.0	µg/L	10.0	ND	102		70-130	
1,2-Dichlorobenzene	11.6	1.0	µg/L	10.0	ND	116		70-130	
1,3-Dichlorobenzene	11.8	1.0	µg/L	10.0	ND	118		70-130	
1,4-Dichlorobenzene	11.1	1.0	µg/L	10.0	ND	111		70-130	
trans-1,4-Dichloro-2-butene	8.01	2.0	µg/L	10.0	ND	80.1		70-130	
Dichlorodifluoromethane (Freon 12)	11.8	2.0	µg/L	10.0	ND	118		70-130	
1,1-Dichloroethane	11.1	1.0	µg/L	10.0	ND	111		70-130	
1,2-Dichloroethane	9.92	1.0	µg/L	10.0	ND	99.2		70-130	
1,1-Dichloroethylene	12.2	1.0	µg/L	10.0	ND	122		70-130	
cis-1,2-Dichloroethylene	11.5	1.0	µg/L	10.0	ND	115		70-130	
trans-1,2-Dichloroethylene	11.2	1.0	µg/L	10.0	ND	112		70-130	
1,2-Dichloropropane	11.1	1.0	µg/L	10.0	ND	111		70-130	
1,3-Dichloropropane	10.3	0.50	µg/L	10.0	ND	103		70-130	
2,2-Dichloropropane	12.4	1.0	µg/L	10.0	ND	124		70-130	
1,1-Dichloropropene	12.3	2.0	µg/L	10.0	ND	123		70-130	
cis-1,3-Dichloropropene	10.5	0.50	µg/L	10.0	ND	105		70-130	
trans-1,3-Dichloropropene	9.48	0.50	µg/L	10.0	ND	94.8		70-130	
Diethyl Ether	10.3	2.0	µg/L	10.0	ND	103		70-130	
Diisopropyl Ether (DIPE)	10.3	0.50	µg/L	10.0	ND	103		70-130	
1,4-Dioxane	71.5	50	µg/L	100	ND	71.5		70-130	
Ethylbenzene	11.9	1.0	µg/L	10.0	ND	119		70-130	
Hexachlorobutadiene	11.3	0.60	µg/L	10.0	ND	113		70-130	
2-Hexanone (MBK)	67.7	10	µg/L	100	ND	67.7	*	70-130	MS-24
Isopropylbenzene (Cumene)	12.4	1.0	µg/L	10.0	ND	124		70-130	
p-Isopropyltoluene (p-Cymene)	12.1	1.0	µg/L	10.0	ND	121		70-130	
Methyl Acetate	8.28	1.0	µg/L	10.0	ND	82.8		70-130	
Methyl tert-Butyl Ether (MTBE)	10.9	1.0	µg/L	10.0	0.320	106		70-130	
Methyl Cyclohexane	13.0	1.0	µg/L	10.0	ND	130		70-130	
Methylene Chloride	10.4	5.0	µg/L	10.0	ND	104		70-130	
4-Methyl-2-pentanone (MIBK)	75.3	10	µg/L	100	ND	75.3		70-130	
Naphthalene	5.77	2.0	µg/L	10.0	ND	57.7	*	70-130	MS-24
n-Propylbenzene	12.0	1.0	µg/L	10.0	ND	120		70-130	
Styrene	12.3	1.0	µg/L	10.0	ND	123		70-130	
1,1,2-Tetrachloroethane	11.7	1.0	µg/L	10.0	ND	117		70-130	
1,1,2,2-Tetrachloroethane	9.53	0.50	µg/L	10.0	ND	95.3		70-130	
Tetrachloroethylene	13.4	1.0	µg/L	10.0	ND	134	*	70-130	MS-15

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD RPD	Limit Notes
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Batch B303679 - SW-846 5030B

Matrix Spike (B303679-MS1)	Source: 22C1230-01			Prepared: 03/21/22 Analyzed: 03/22/22				
Tetrahydrofuran	8.04	10	µg/L	10.0	ND	80.4	70-130	J
Toluene	12.2	1.0	µg/L	10.0	ND	122	70-130	
1,2,3-Trichlorobenzene	7.47	5.0	µg/L	10.0	ND	74.7	70-130	
1,2,4-Trichlorobenzene	8.19	1.0	µg/L	10.0	ND	81.9	70-130	
1,3,5-Trichlorobenzene	10.7	1.0	µg/L	10.0	ND	107	70-130	
1,1,1-Trichloroethane	12.0	1.0	µg/L	10.0	ND	120	70-130	
1,1,2-Trichloroethane	10.6	1.0	µg/L	10.0	ND	106	70-130	
Trichloroethylene	12.7	1.0	µg/L	10.0	ND	127	70-130	
Trichlorofluoromethane (Freon 11)	12.1	2.0	µg/L	10.0	ND	121	70-130	
1,2,3-Trichloropropane	8.37	2.0	µg/L	10.0	ND	83.7	70-130	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	14.9	1.0	µg/L	10.0	ND	149 *	70-130	MS-15
1,2,4-Trimethylbenzene	11.5	1.0	µg/L	10.0	ND	115	70-130	
1,3,5-Trimethylbenzene	11.9	1.0	µg/L	10.0	ND	119	70-130	
Vinyl Chloride	12.4	2.0	µg/L	10.0	ND	124	70-130	
m+p Xylene	24.2	2.0	µg/L	20.0	ND	121	70-130	
o-Xylene	11.8	1.0	µg/L	10.0	ND	118	70-130	
Surrogate: 1,2-Dichloroethane-d4	21.6		µg/L	25.0		86.4	70-130	
Surrogate: Toluene-d8	23.8		µg/L	25.0		95.1	70-130	
Surrogate: 4-Bromofluorobenzene	24.0		µg/L	25.0		95.9	70-130	

Matrix Spike Dup (B303679-MSD1)	Source: 22C1230-01			Prepared: 03/21/22 Analyzed: 03/22/22				
Acetone	76.7	50	µg/L	100	ND	76.7	70-130	10.9 30 V-05
Acrylonitrile	8.63	5.0	µg/L	10.0	ND	86.3	70-130	9.72 30
tert-Amyl Methyl Ether (TAME)	11.8	0.50	µg/L	10.0	ND	118	70-130	3.62 30
Benzene	12.0	1.0	µg/L	10.0	ND	120	70-130	1.00 30
Bromobenzene	10.8	1.0	µg/L	10.0	ND	108	70-130	3.11 30
Bromoform	11.0	1.0	µg/L	10.0	ND	110	70-130	0.723 30
Bromochloromethane	11.3	0.50	µg/L	10.0	ND	113	70-130	0.801 30
Bromodichloromethane	10.5	1.0	µg/L	10.0	ND	105	70-130	7.68 30
Bromomethane	13.5	2.0	µg/L	10.0	ND	135 *	70-130	0.00 30 MS-15
2-Butanone (MEK)	81.1	20	µg/L	100	ND	81.1	70-130	12.9 30
tert-Butyl Alcohol (TBA)	81.2	20	µg/L	100	ND	81.2	70-130	17.1 30
n-Butylbenzene	10.8	1.0	µg/L	10.0	ND	108	70-130	0.744 30
sec-Butylbenzene	11.9	1.0	µg/L	10.0	ND	119	70-130	1.75 30
tert-Butylbenzene	12.2	1.0	µg/L	10.0	ND	122	70-130	1.31 30
tert-Butyl Ethyl Ether (TBEE)	10.7	0.50	µg/L	10.0	ND	107	70-130	0.0934 30
Carbon Disulfide	131	5.0	µg/L	100	ND	131 *	70-130	0.0611 30 MS-15
Carbon Tetrachloride	12.4	5.0	µg/L	10.0	ND	124	70-130	0.726 30
Chlorobenzene	12.2	1.0	µg/L	10.0	ND	122	70-130	0.737 30
Chlorodibromomethane	11.2	0.50	µg/L	10.0	ND	112	70-130	4.30 30
Chloroethane	13.8	2.0	µg/L	10.0	ND	138 *	70-130	0.650 30 MS-15
Chloroform	11.4	2.0	µg/L	10.0	ND	114	70-130	1.58 30
Chloromethane	12.2	2.0	µg/L	10.0	ND	122	70-130	8.20 30
2-Chlorotoluene	11.6	1.0	µg/L	10.0	ND	116	70-130	1.20 30
4-Chlorotoluene	11.4	1.0	µg/L	10.0	ND	114	70-130	0.881 30
1,2-Dibromo-3-chloropropane (DBCP)	7.56	5.0	µg/L	10.0	ND	75.6	70-130	5.30 30
1,2-Dibromoethane (EDB)	10.5	0.50	µg/L	10.0	ND	105	70-130	4.99 30
Dibromomethane	10.9	1.0	µg/L	10.0	ND	109	70-130	6.35 30
1,2-Dichlorobenzene	11.4	1.0	µg/L	10.0	ND	114	70-130	1.92 30
1,3-Dichlorobenzene	11.4	1.0	µg/L	10.0	ND	114	70-130	3.46 30
1,4-Dichlorobenzene	11.1	1.0	µg/L	10.0	ND	111	70-130	0.181 30
trans-1,4-Dichloro-2-butene	8.89	2.0	µg/L	10.0	ND	88.9	70-130	10.4 30

QUALITY CONTROL
Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B303679 - SW-846 5030B										
Matrix Spike Dup (B303679-MSD1)										
Source: 22C1230-01 Prepared: 03/21/22 Analyzed: 03/22/22										
Dichlorodifluoromethane (Freon 12)	11.3	2.0	µg/L	10.0	ND	113	70-130	4.07	30	
1,1-Dichloroethane	11.1	1.0	µg/L	10.0	ND	111	70-130	0.0900	30	
1,2-Dichloroethane	9.99	1.0	µg/L	10.0	ND	99.9	70-130	0.703	30	
1,1-Dichloroethylene	12.2	1.0	µg/L	10.0	ND	122	70-130	0.164	30	
cis-1,2-Dichloroethylene	11.4	1.0	µg/L	10.0	ND	114	70-130	0.436	30	
trans-1,2-Dichloroethylene	11.6	1.0	µg/L	10.0	ND	116	70-130	2.89	30	
1,2-Dichloropropane	11.2	1.0	µg/L	10.0	ND	112	70-130	1.44	30	
1,3-Dichloropropane	10.4	0.50	µg/L	10.0	ND	104	70-130	0.968	30	
2,2-Dichloropropane	12.0	1.0	µg/L	10.0	ND	120	70-130	2.78	30	
1,1-Dichloropropene	12.3	2.0	µg/L	10.0	ND	123	70-130	0.407	30	
cis-1,3-Dichloropropene	10.7	0.50	µg/L	10.0	ND	107	70-130	1.42	30	
trans-1,3-Dichloropropene	9.98	0.50	µg/L	10.0	ND	99.8	70-130	5.14	30	
Diethyl Ether	10.2	2.0	µg/L	10.0	ND	102	70-130	1.27	30	
Diisopropyl Ether (DIPE)	10.4	0.50	µg/L	10.0	ND	104	70-130	1.54	30	
1,4-Dioxane	80.7	50	µg/L	100	ND	80.7	70-130	12.1	30	
Ethylbenzene	12.1	1.0	µg/L	10.0	ND	121	70-130	1.58	30	
Hexachlorobutadiene	11.2	0.60	µg/L	10.0	ND	112	70-130	1.34	30	
2-Hexanone (MBK)	78.5	10	µg/L	100	ND	78.5	70-130	14.8	30	
Isopropylbenzene (Cumene)	12.6	1.0	µg/L	10.0	ND	126	70-130	1.60	30	
p-Isopropyltoluene (p-Cymene)	11.6	1.0	µg/L	10.0	ND	116	70-130	4.31	30	
Methyl Acetate	8.89	1.0	µg/L	10.0	ND	88.9	70-130	7.11	30	
Methyl tert-Butyl Ether (MTBE)	11.4	1.0	µg/L	10.0	0.320	111	70-130	4.65	30	
Methyl Cyclohexane	12.8	1.0	µg/L	10.0	ND	128	70-130	1.63	30	
Methylene Chloride	10.3	5.0	µg/L	10.0	ND	103	70-130	0.965	30	
4-Methyl-2-pentanone (MIBK)	84.9	10	µg/L	100	ND	84.9	70-130	12.0	30	
Naphthalene	7.16	2.0	µg/L	10.0	ND	71.6	70-130	21.5	30	
n-Propylbenzene	11.8	1.0	µg/L	10.0	ND	118	70-130	1.18	30	
Styrene	12.2	1.0	µg/L	10.0	ND	122	70-130	0.734	30	
1,1,1,2-Tetrachloroethane	12.0	1.0	µg/L	10.0	ND	120	70-130	1.94	30	
1,1,2,2-Tetrachloroethane	10.2	0.50	µg/L	10.0	ND	102	70-130	7.18	30	
Tetrachloroethylene	13.4	1.0	µg/L	10.0	ND	134	*	70-130	0.00	30
Tetrahydrofuran	9.21	10	µg/L	10.0	ND	92.1	70-130	13.6	30	J
Toluene	12.4	1.0	µg/L	10.0	ND	124	70-130	1.54	30	
1,2,3-Trichlorobenzene	8.63	5.0	µg/L	10.0	ND	86.3	70-130	14.4	30	
1,2,4-Trichlorobenzene	8.74	1.0	µg/L	10.0	ND	87.4	70-130	6.50	30	
1,3,5-Trichlorobenzene	10.5	1.0	µg/L	10.0	ND	105	70-130	1.99	30	
1,1,1-Trichloroethane	12.1	1.0	µg/L	10.0	ND	121	70-130	0.912	30	
1,1,2-Trichloroethane	11.3	1.0	µg/L	10.0	ND	113	70-130	7.04	30	
Trichloroethylene	12.5	1.0	µg/L	10.0	ND	125	70-130	1.03	30	
Trichlorofluoromethane (Freon 11)	11.9	2.0	µg/L	10.0	ND	119	70-130	1.41	30	
1,2,3-Trichloropropane	9.13	2.0	µg/L	10.0	ND	91.3	70-130	8.69	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	14.5	1.0	µg/L	10.0	ND	145	*	70-130	2.73	30
1,2,4-Trimethylbenzene	11.4	1.0	µg/L	10.0	ND	114	70-130	0.437	30	
1,3,5-Trimethylbenzene	12.0	1.0	µg/L	10.0	ND	120	70-130	1.00	30	
Vinyl Chloride	12.6	2.0	µg/L	10.0	ND	126	70-130	1.52	30	
m+p Xylene	24.3	2.0	µg/L	20.0	ND	122	70-130	0.536	20	
o-Xylene	12.1	1.0	µg/L	10.0	ND	121	70-130	2.42	30	
Surrogate: 1,2-Dichloroethane-d4	20.7		µg/L	25.0		82.8	70-130			
Surrogate: Toluene-d8	23.7		µg/L	25.0		94.6	70-130			
Surrogate: 4-Bromofluorobenzene	23.7		µg/L	25.0		94.8	70-130			

FLAG/QUALIFIER SUMMARY

- * QC result is outside of established limits.
 - † Wide recovery limits established for difficult compound.
 - ‡ Wide RPD limits established for difficult compound.
 - # Data exceeded client recommended or regulatory level
 - ND Not Detected
 - RL Reporting Limit is at the level of quantitation (LOQ)
 - DL Detection Limit is the lower limit of detection determined by the MDL study
 - MCL Maximum Contaminant Level
- Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
- No results have been blank subtracted unless specified in the case narrative section.
- J Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
 - MS-15 Matrix spike and matrix spike duplicate recoveries are outside of control limits. Data validation is not affected since results for this compound in this sample are "not detected", and recovery bias is on the high side.
 - MS-24 Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.
 - RL-11 Elevated reporting limit due to high concentration of target compounds.
 - V-05 Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260D in Water</i>	
Acetone	CT,ME,NH,VA,NY
Acrylonitrile	CT,ME,NH,VA,NY
tert-Amyl Methyl Ether (TAME)	ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromobenzene	ME,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
tert-Butyl Alcohol (TBA)	ME,NH,VA,NY
n-Butylbenzene	ME,VA,NY
sec-Butylbenzene	ME,VA,NY
tert-Butylbenzene	ME,VA,NY
tert-Butyl Ethyl Ether (TBEE)	ME,NH,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
2-Chlorotoluene	ME,NH,VA,NY
4-Chlorotoluene	ME,NH,VA,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
Dibromomethane	ME,NH,VA,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
trans-1,4-Dichloro-2-butene	ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
1,3-Dichloropropane	ME,VA,NY
2,2-Dichloropropane	ME,NH,VA,NY
1,1-Dichloropropene	ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
Diethyl Ether	ME,NY
Diisopropyl Ether (DIPE)	ME,NH,VA,NY
1,4-Dioxane	ME,NY
Ethylbenzene	CT,ME,NH,VA,NY

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
<i>SW-846 8260D in Water</i>	
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
p-Isopropyltoluene (p-Cymene)	CT,ME,NH,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
n-Propylbenzene	CT,ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,1,2-Tetrachloroethane	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,3,5-Trichlorobenzene	ME
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,2,3-Trichloropropane	ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
1,2,4-Trimethylbenzene	ME,VA,NY
1,3,5-Trimethylbenzene	ME,VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
m+p Xylene	CT,ME,NH,VA,NY
o-Xylene	CT,ME,NH,VA,NY

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

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Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2022
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

2261230



Phone: 413-525-2332

Fax: 413-525-6405

Email: info@contestlabs.com

CHAIN OF CUSTODY RECORD (New York)

Doc # 380 Rev 1_03242017

39 Spruce Street
East Longmeadow, MA 01028

Sample Name:	Chris Robinson	Request Date:	7-Day <input type="checkbox"/> 10-Day <input checked="" type="checkbox"/> Rush Approval Required <input type="checkbox"/>	Due Date:	1-Day <input type="checkbox"/> 3-Day <input type="checkbox"/> 2-Day <input type="checkbox"/> Data Delivery <input type="checkbox"/>	10-Day <input type="checkbox"/> 4-Day <input type="checkbox"/> Format: PDF <input type="checkbox"/> EXCEL <input type="checkbox"/>	1 Day <input type="checkbox"/> 3 Day <input type="checkbox"/> Other: CLP Like Data Plus Required: <input checked="" type="checkbox"/>	ANALYSIS REQUESTED
Address:	264 W Jefferson St. Syracuse, NY 13202							
Phone:	207-400-1350							
Project Name:	ROXY DRINKERS							
Project Location:	WYNDHAM SKILL, NY							
Project Number:	1602S06							
Project Manager:	Chris Sander							
Con-Test Quote Name/Number:	Chris Sander CSander@Contest.com							
Invoice Recipient:	Chris Robinson							
Sampled By:	Nicah Robinson							
Comments:	505-0928-0105							
Con-Test Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code	Code
1	442024-MW-114A	3-15-22 1342		<input checked="" type="checkbox"/>	<input type="checkbox"/>	GW	GJ	X
2	442024-MW-115A	3-16-22 1446		<input checked="" type="checkbox"/>	<input type="checkbox"/>	GW	GT	X
3	442024-MW-106A	3-15-22 1835		<input checked="" type="checkbox"/>	<input type="checkbox"/>	GW	V	X
4	442024-MW-111	3-15-22 1647		<input checked="" type="checkbox"/>	<input type="checkbox"/>	GW	V	X
5	442024-TW-07	3-16-22 0854		<input checked="" type="checkbox"/>	<input type="checkbox"/>	GW	V	X
6	442024-TW-08	3-16-22 0938		<input checked="" type="checkbox"/>	<input type="checkbox"/>	GW	U	X
7	442024-TW-10	3-16-22 1054		<input checked="" type="checkbox"/>	<input type="checkbox"/>	GW	U	X
8	442024-TW-09	3-16-22 1146		<input checked="" type="checkbox"/>	<input type="checkbox"/>	GW	V	X
9	442024-TW-06	3-16-22 1225		<input checked="" type="checkbox"/>	<input type="checkbox"/>	GW	U	X
10	442024-FD-031622	3-16-22 -		<input checked="" type="checkbox"/>	<input type="checkbox"/>	GW	V	X
Please use the following codes to indicate possible sample concentration H - High; M - Medium; L - Low; C - Clean; U - Unknown								
Reinquished by: (signature)	Date/Time:	Program & Regulatory Information						
<i>Chris Robinson</i>	3/16/22 1545	<input type="checkbox"/> AW STDS <input type="checkbox"/> NY TOGS <input type="checkbox"/> NYC Sewer Discharge <input type="checkbox"/> NY CP-51 <input type="checkbox"/> Part 360 GW (Landfill) <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NY Part 375 <input type="checkbox"/> Other: NY Part 375						
Received by: (signature)	Date/Time:	Delivery Details						
<i>ADL</i>	3/16/22 1545	<input type="checkbox"/> Enhanced Data Package <input checked="" type="checkbox"/> NYSEDEC EQUIS EDD <input type="checkbox"/> EQUIS (Standard) EDD <input type="checkbox"/> NY Regulatory EDD <input type="checkbox"/> NY Regs Hts-Only EDD						
Reinquished by: (signature)	Date/Time:	Project Entity						
<i>Chris Robinson</i>	3/16/22 1545	<input checked="" type="checkbox"/> Government <input type="checkbox"/> Municipality <input type="checkbox"/> Federal <input type="checkbox"/> School <input type="checkbox"/> City <input type="checkbox"/> MBTA						
Received by: (signature)	Date/Time:	Other						
<i>Chris Robinson</i>	2-3	<input type="checkbox"/> Chromatogram <input type="checkbox"/> AIHA-LAP, LLC						
Reinquished by: (signature)	Date/Time:	PCB ONLY						
<i>Chris Robinson</i>	3/16/22 1545	<input type="checkbox"/> Soxhlet <input type="checkbox"/> Non Soxhlet						



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Friday, March 18, 2022 at 9:26 am



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Signed for by: C.RIOS

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FROM

East Syracuse, NY US

TO

EAST LONGMEADOW, MA US

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I Have Not Confirmed Sample Container
Numbers With Lab Staff Before Relinquishing
Over Samples



con-test®
ANALYTICAL LABORATORY

Doc# 277 Rev 5 2017

Login Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client EA Engineering Received By ZJ Date 3/18/22 Time 926

How were the samples received? In Cooler T No Cooler _____ On Ice T No Ice _____
Direct from Sampling F Ambient _____ Melted Ice _____

Were samples within Temperature? 2-6°C T By Gun # 5 Actual Temp - 2-3
By Blank # _____ Actual Temp - _____

Was Custody Seal Intact? N/A Were Samples Tampered with? F
Was COC Relinquished? T Does Chain Agree With Samples? T

Are there broken/leaking/loose caps on any samples? F

Is COC in ink/ Legible? T Were samples received within holding time? T
Did COC include all Client T Sampler Name T
pertinent Information? Project F ID's T Collection Dates/Times T

Are Sample labels filled out and legible? F

Are there Lab to Filters? F Who was notified? _____

Are there Rushes? F Who was notified? _____

Are there Short Holds? F Who was notified? _____

Is there enough Volume? T MS/MSD? N/A

Is there Headspace where applicable? N/A Is splitting samples required? F

Proper Media/Containers Used? T On COC? F

Were trip blanks received? T

Do all samples have the proper pH? N/A Acid _____ Base _____

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-	<u>26</u>	500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-		Flashpoint		Col./Bacteria		2oz Amb/Clear
DI-		Other Glass		Other Plastic		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

Unused Media

Vials	#	Containers:	#	#	#	#
Unp-		1 Liter Amb.		1 Liter Plastic		16 oz Amb.
HCL-		500 mL Amb.		500 mL Plastic		8oz Amb/Clear
Meoh-		250 mL Amb.		250 mL Plastic		4oz Amb/Clear
Bisulfate-		Col./Bacteria		Flashpoint		2oz Amb/Clear
DI-		Other Plastic		Other Glass		Encore
Thiosulfate-		SOC Kit		Plastic Bag		Frozen:
Sulfuric-		Perchlorate		Ziplock		

Comments:

March 31, 2022

Noah Robinson
NYDEC_EA Engineering, Science & Tech. - NY
269 W. Jefferson Street
Syracuse, NY 13202

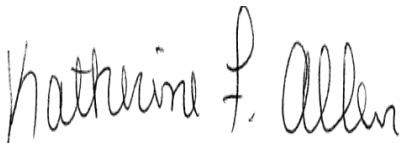
Project Location: Roxy Cleaners
Client Job Number:
Project Number: 442024
Laboratory Work Order Number: 22C1325

Enclosed are results of analyses for samples as received by the laboratory on March 18, 2022. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mike Buttrick
Project Manager



QA Officer
Katherine Allen



Laboratory Manager
Daren Damboragian

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

NYDEC_EA Engineering, Science & Tech. - NY
 269 W. Jefferson Street
 Syracuse, NY 13202
 ATTN: Noah Robinson

REPORT DATE: 3/31/2022

PURCHASE ORDER NUMBER: 142876

PROJECT NUMBER: 442024

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 22C1325

The results of analyses performed on the following samples submitted to Con-Test, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Roxy Cleaners

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
IA-[REDACTED]	22C1325-01	Air		EPA TO-15	
SV-[REDACTED]	22C1325-02	Air		EPA TO-15	
OA-[REDACTED]	22C1325-03	Air		EPA TO-15	
SV-01	22C1325-04	Air		EPA TO-15	
SV-04	22C1325-07	Air		EPA TO-15	
SV-05	22C1325-08	Air		EPA TO-15	

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

L-01 Laboratory fortified blank/laboratory control sample recovery outside of control limits. Data validation is not affected since all results are "not detected" for all samples in this batch for this compound and bias is on the high side.

Analyte & Samples(s) Qualified:

2-Hexanone (MBK)

B304046-BS1, B304148-BS1

L-03 Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

1,2,4-Trichlorobenzene, Ethyl Acetate, Hexachlorobutadiene

22C1325-01[IA-■■■] 22C1325-02[SV-■■■] 22C1325-03[OA-■■■] 22C1325-04[SV-01], 22C1325-07[SV-04], 22C1325-08[SV-05], B304046-BLK1, B304046-BS1, B304148-BLK1, B304148-BS1

L-05 Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.

Analyte & Samples(s) Qualified:

Ethanol

22C1325-01RE1[IA-■■■] 22C1325-02RE2[SV-■■■] 22C1325-03[OA-■■■] 22C1325-04RE1[SV-01], 22C1325-07RE1[SV-04], 22C1325-08[SV-05], B304046-BLK1, B304046-BS1, B304148-BS1

V-04 Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.

Analyte & Samples(s) Qualified:

1,2,4-Trichlorobenzene

22C1325-01[IA-■■■] 22C1325-02[SV-■■■] 22C1325-03[OA-■■■] 22C1325-04[SV-01], 22C1325-07[SV-04], 22C1325-08[SV-05], B304046-BLK1, B304046-BS1, B304148-BLK1, B304148-BS1, S069584-CCV1, S069625-CCV1

V-05 Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

1,2,4-Trichlorobenzene, Ethyl Acetate

22C1325-01[IA-■■■] 22C1325-02[SV-■■■] 22C1325-03[OA-■■■] 22C1325-04[SV-01], 22C1325-07[SV-04], 22C1325-08[SV-05], B304046-BLK1, B304046-BS1, B304148-BLK1, B304148-BS1, S069584-CCV1, S069625-CCV1

V-06 Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

Analyte & Samples(s) Qualified:

Ethanol

22C1325-01RE1[IA-■■■] 22C1325-02RE2[SV-■■■] 22C1325-03[OA-■■■] 22C1325-04RE1[SV-01], 22C1325-07RE1[SV-04], 22C1325-08[SV-05], B304046-BLK1, B304046-BS1, B304148-BS1, S069584-CCV1, S069625-CCV1

V-20 Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

4-Methyl-2-pentanone (MIBK)

B304148-BS1, S069625-CCV1

V-34 Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:

Ethyl Acetate

22C1325-01[IA-■■■] 22C1325-02[SV-■■■] 22C1325-03[OA-■■■] 22C1325-04[SV-01], 22C1325-07[SV-04], 22C1325-08[SV-05], B304046-BLK1, B304046-BS1, B304148-BLK1, B304148-BS1, S069584-CCV1, S069625-CCV1

V-36 Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Vinyl Acetate

B304046-BS1, B304148-BS1, S069584-CCV1, S069625-CCV1

Z-01 Sample had a final vacuum of zero. Flow controllers have been verified to be okay, RPD was <20%

Analyte & Samples(s) Qualified:

22C1325-08[SV-05]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

ANALYTICAL RESULTS

Project Location: Roxy Cleaners
 Date Received: 3/18/2022

Sample ID: 22C1325-01

Sample Matrix: Air
 Sampled: 3/16/2022 10:09

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 10240
 Canister Size: 1.4 liter
 Flow Controller ID: 00952
 Sample Type: 24 hr

Work Order: 22C1325
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -12
 Receipt Vacuum(in Hg):
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling: >20%

EPA TO-15

Analyte	Results	ppbv			Flag/Qual	Results	ug/m3			Date/Time	
		RL	MDL	Dilution			MDL	Analyzed	Analyst		
Acetone	9.3	1.4	0.84			22	3.3	2.0	0.698	3/23/22 15:45	BRF
Benzene	0.54	0.035	0.026			1.7	0.11	0.084	0.698	3/23/22 15:45	BRF
Benzyl chloride	ND	0.035	0.031			ND	0.18	0.16	0.698	3/23/22 15:45	BRF
Bromodichloromethane	0.047	0.035	0.024			0.32	0.23	0.16	0.698	3/23/22 15:45	BRF
Bromoform	ND	0.035	0.024			ND	0.36	0.25	0.698	3/23/22 15:45	BRF
Bromomethane	ND	0.035	0.028			ND	0.14	0.11	0.698	3/23/22 15:45	BRF
1,3-Butadiene	ND	0.035	0.029			ND	0.077	0.065	0.698	3/23/22 15:45	BRF
2-Butanone (MEK)	0.74	1.4	0.37	J		2.2	4.1	1.1	0.698	3/23/22 15:45	BRF
Carbon Disulfide	0.53	0.35	0.032			1.6	1.1	0.10	0.698	3/23/22 15:45	BRF
Carbon Tetrachloride	0.085	0.035	0.028			0.54	0.22	0.17	0.698	3/23/22 15:45	BRF
Chlorobenzene	ND	0.035	0.023			ND	0.16	0.11	0.698	3/23/22 15:45	BRF
Chloroethane	ND	0.035	0.025			ND	0.092	0.067	0.698	3/23/22 15:45	BRF
Chloroform	0.33	0.035	0.033			1.6	0.17	0.16	0.698	3/23/22 15:45	BRF
Chloromethane	0.59	0.070	0.028			1.2	0.14	0.057	0.698	3/23/22 15:45	BRF
Cyclohexane	ND	0.035	0.023			ND	0.12	0.079	0.698	3/23/22 15:45	BRF
Dibromochloromethane	ND	0.035	0.023			ND	0.30	0.20	0.698	3/23/22 15:45	BRF
1,2-Dibromoethane (EDB)	ND	0.035	0.021			ND	0.27	0.16	0.698	3/23/22 15:45	BRF
1,2-Dichlorobenzene	ND	0.035	0.020			ND	0.21	0.12	0.698	3/23/22 15:45	BRF
1,3-Dichlorobenzene	ND	0.035	0.019			ND	0.21	0.12	0.698	3/23/22 15:45	BRF
1,4-Dichlorobenzene	ND	0.035	0.023			ND	0.21	0.14	0.698	3/23/22 15:45	BRF
Dichlorodifluoromethane (Freon 12)	0.48	0.035	0.034			2.4	0.17	0.17	0.698	3/23/22 15:45	BRF
1,1-Dichloroethane	ND	0.035	0.030			ND	0.14	0.12	0.698	3/23/22 15:45	BRF
1,2-Dichloroethane	ND	0.035	0.032			ND	0.14	0.13	0.698	3/23/22 15:45	BRF
1,1-Dichloroethylene	ND	0.035	0.027			ND	0.14	0.11	0.698	3/23/22 15:45	BRF
cis-1,2-Dichloroethylene	0.036	0.035	0.025			0.14	0.14	0.10	0.698	3/23/22 15:45	BRF
trans-1,2-Dichloroethylene	ND	0.035	0.027			ND	0.14	0.11	0.698	3/23/22 15:45	BRF
1,2-Dichloropropane	0.034	0.035	0.019	J		0.16	0.16	0.087	0.698	3/23/22 15:45	BRF
cis-1,3-Dichloropropene	ND	0.035	0.018			ND	0.16	0.082	0.698	3/23/22 15:45	BRF
trans-1,3-Dichloropropene	ND	0.035	0.018			ND	0.16	0.081	0.698	3/23/22 15:45	BRF
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035	0.034			ND	0.24	0.24	0.698	3/23/22 15:45	BRF
1,4-Dioxane	ND	0.35	0.029			ND	1.3	0.10	0.698	3/23/22 15:45	BRF
Ethanol	82	40	18	L-05, V-06		150	75	33	20	3/23/22 15:11	BRF
Ethyl Acetate	ND	0.35	0.18	V-05, L-03, V-34		ND	1.3	0.64	0.698	3/23/22 15:45	BRF
Ethylbenzene	0.13	0.035	0.020			0.55	0.15	0.088	0.698	3/23/22 15:45	BRF
4-Ethyltoluene	0.30	0.035	0.021			1.5	0.17	0.11	0.698	3/23/22 15:45	BRF
Heptane	0.22	0.035	0.022			0.91	0.14	0.091	0.698	3/23/22 15:45	BRF
Hexachlorobutadiene	ND	0.035	0.029	L-03		ND	0.37	0.31	0.698	3/23/22 15:45	BRF
Hexane	ND	1.4	0.18			ND	4.9	0.64	0.698	3/23/22 15:45	BRF
2-Hexanone (MBK)	ND	0.070	0.018			ND	0.29	0.072	0.698	3/23/22 15:45	BRF
Isopropanol	ND	1.4	0.24			ND	3.4	0.59	0.698	3/23/22 15:45	BRF
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.027			ND	0.13	0.097	0.698	3/23/22 15:45	BRF
Methylene Chloride	0.24	0.35	0.16	J		0.82	1.2	0.56	0.698	3/23/22 15:45	BRF
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018			ND	0.14	0.073	0.698	3/23/22 15:45	BRF
Naphthalene	0.045	0.035	0.022			0.24	0.18	0.12	0.698	3/23/22 15:45	BRF
Propene	ND	1.4	0.31			ND	2.4	0.53	0.698	3/23/22 15:45	BRF
Styrene	0.061	0.035	0.018			0.26	0.15	0.078	0.698	3/23/22 15:45	BRF

ANALYTICAL RESULTS

Project Location: Roxy Cleaners

Date Received: 3/18/2022

Sample ID: 22C1325-01

Sample Matrix: Air

Sampled: 3/16/2022 10:09

Sample Description/Location:

Sub Description/Location:

Canister ID: 10240

Canister Size: 1.4 liter

Flow Controller ID: 00952

Sample Type: 24 hr

Work Order: 22C1325

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -12

Receipt Vacuum(in Hg):

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling: >20%

EPA TO-15

Analyte	Results	ppbv			Flag/Qual	Results	ug/m3			Date/Time	
		RL	MDL				RL	MDL	Dilution	Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.035	0.019			ND	0.24	0.13	0.698	3/23/22 15:45	BRF
Tetrachloroethylene	0.80	0.035	0.027			5.5	0.24	0.18	0.698	3/23/22 15:45	BRF
Tetrahydrofuran	ND	0.35	0.057			ND	1.0	0.17	0.698	3/23/22 15:45	BRF
Toluene	0.46	0.035	0.020			1.7	0.13	0.075	0.698	3/23/22 15:45	BRF
1,2,4-Trichlorobenzene	ND	0.070	0.024	V-04, V-05, L-03		ND	0.52	0.18	0.698	3/23/22 15:45	BRF
1,1,1-Trichloroethane	ND	0.035	0.027			ND	0.19	0.15	0.698	3/23/22 15:45	BRF
1,1,2-Trichloroethane	ND	0.035	0.025			ND	0.19	0.13	0.698	3/23/22 15:45	BRF
Trichloroethylene	0.21	0.035	0.024			1.1	0.19	0.13	0.698	3/23/22 15:45	BRF
Trichlorofluoromethane (Freon 11)	0.79	0.14	0.041			4.4	0.78	0.23	0.698	3/23/22 15:45	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.066	0.14	0.039	J		0.51	1.1	0.30	0.698	3/23/22 15:45	BRF
1,2,4-Trimethylbenzene	1.3	0.035	0.015			6.3	0.17	0.076	0.698	3/23/22 15:45	BRF
1,3,5-Trimethylbenzene	0.26	0.035	0.018			1.3	0.17	0.091	0.698	3/23/22 15:45	BRF
Vinyl Acetate	ND	0.70	0.19			ND	2.5	0.66	0.698	3/23/22 15:45	BRF
Vinyl Chloride	ND	0.035	0.031			ND	0.089	0.080	0.698	3/23/22 15:45	BRF
m&p-Xylene	0.52	0.070	0.039			2.2	0.30	0.17	0.698	3/23/22 15:45	BRF
o-Xylene	0.54	0.035	0.018			2.3	0.15	0.078	0.698	3/23/22 15:45	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	78.1	70-130	3/23/22 15:11
4-Bromofluorobenzene (1)	87.6	70-130	3/23/22 15:45

ANALYTICAL RESULTS

Project Location: Roxy Cleaners

Date Received: 3/18/2022

Sample ID: 22C1325-02

Sample Matrix: Air

Sampled: 3/16/2022 10:12

Sample Description/Location:

Sub Description/Location:

Canister ID: 010208

Canister Size: 1.4 liter

Flow Controller ID: 010494

Sample Type: 24 hr

Work Order: 22C1325

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg):

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	Results	ppbv			Flag/Qual	Results	ug/m3			Date/Time	
		RL	MDL	Dilution			RL	MDL	Analyzed	Analyst	
Acetone	230	20	12			550	48	29	10	3/24/22 19:26	BRF
Benzene	1.2	0.20	0.15			3.7	0.64	0.48	4	3/23/22 16:40	BRF
Benzyl chloride	ND	0.20	0.18			ND	1.0	0.91	4	3/23/22 16:40	BRF
Bromodichloromethane	ND	0.20	0.14			ND	1.3	0.94	4	3/23/22 16:40	BRF
Bromoform	ND	0.20	0.14			ND	2.1	1.4	4	3/23/22 16:40	BRF
Bromomethane	ND	0.20	0.16			ND	0.78	0.63	4	3/23/22 16:40	BRF
1,3-Butadiene	ND	0.20	0.17			ND	0.44	0.37	4	3/23/22 16:40	BRF
2-Butanone (MEK)	2.7	8.0	2.1	J		8.0	24	6.3	4	3/23/22 16:40	BRF
Carbon Disulfide	1.2	2.0	0.18	J		3.7	6.2	0.58	4	3/23/22 16:40	BRF
Carbon Tetrachloride	ND	0.20	0.16			ND	1.3	1.0	4	3/23/22 16:40	BRF
Chlorobenzene	ND	0.20	0.13			ND	0.92	0.61	4	3/23/22 16:40	BRF
Chloroethane	ND	0.20	0.15			ND	0.53	0.39	4	3/23/22 16:40	BRF
Chloroform	0.28	0.20	0.19			1.4	0.98	0.93	4	3/23/22 16:40	BRF
Chloromethane	0.79	0.40	0.16			1.6	0.83	0.33	4	3/23/22 16:40	BRF
Cyclohexane	0.86	0.20	0.13			3.0	0.69	0.46	4	3/23/22 16:40	BRF
Dibromochloromethane	ND	0.20	0.13			ND	1.7	1.1	4	3/23/22 16:40	BRF
1,2-Dibromoethane (EDB)	ND	0.20	0.12			ND	1.5	0.93	4	3/23/22 16:40	BRF
1,2-Dichlorobenzene	ND	0.20	0.11			ND	1.2	0.69	4	3/23/22 16:40	BRF
1,3-Dichlorobenzene	ND	0.20	0.11			ND	1.2	0.67	4	3/23/22 16:40	BRF
1,4-Dichlorobenzene	ND	0.20	0.13			ND	1.2	0.79	4	3/23/22 16:40	BRF
Dichlorodifluoromethane (Freon 12)	0.49	0.20	0.20			2.4	0.99	0.97	4	3/23/22 16:40	BRF
1,1-Dichloroethane	ND	0.20	0.17			ND	0.81	0.71	4	3/23/22 16:40	BRF
1,2-Dichloroethane	ND	0.20	0.18			ND	0.81	0.73	4	3/23/22 16:40	BRF
1,1-Dichloroethylene	ND	0.20	0.15			ND	0.79	0.60	4	3/23/22 16:40	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15			ND	0.79	0.58	4	3/23/22 16:40	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16			ND	0.79	0.62	4	3/23/22 16:40	BRF
1,2-Dichloropropane	ND	0.20	0.11			ND	0.92	0.50	4	3/23/22 16:40	BRF
cis-1,3-Dichloropropene	ND	0.20	0.10			ND	0.91	0.47	4	3/23/22 16:40	BRF
trans-1,3-Dichloropropene	ND	0.20	0.10			ND	0.91	0.46	4	3/23/22 16:40	BRF
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.20	0.20			ND	1.4	1.4	4	3/23/22 16:40	BRF
1,4-Dioxane	ND	2.0	0.17			ND	7.2	0.60	4	3/23/22 16:40	BRF
Ethanol	990	600	260	L-05, V-06		1900	1100	500	300	3/25/22 7:57	BRF
Ethyl Acetate	1.1	2.0	1.0	L-03, J, V-05, V-34		4.1	7.2	3.6	4	3/23/22 16:40	BRF
Ethylbenzene	1.5	0.20	0.12			6.5	0.87	0.51	4	3/23/22 16:40	BRF
4-Ethyltoluene	0.37	0.20	0.12			1.8	0.98	0.60	4	3/23/22 16:40	BRF
Heptane	1.6	0.20	0.13			6.5	0.82	0.52	4	3/23/22 16:40	BRF
Hexachlorobutadiene	ND	0.20	0.16	L-03		ND	2.1	1.8	4	3/23/22 16:40	BRF
Hexane	ND	8.0	1.0			ND	28	3.7	4	3/23/22 16:40	BRF
2-Hexanone (MBK)	ND	0.40	0.10			ND	1.6	0.41	4	3/23/22 16:40	BRF
Isopropanol	33	8.0	1.4			82	20	3.4	4	3/23/22 16:40	BRF
Methyl tert-Butyl Ether (MTBE)	ND	0.20	0.15			ND	0.72	0.56	4	3/23/22 16:40	BRF
Methylene Chloride	ND	2.0	0.93			ND	6.9	3.2	4	3/23/22 16:40	BRF
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.10			ND	0.82	0.42	4	3/23/22 16:40	BRF
Naphthalene	ND	0.20	0.13			ND	1.0	0.66	4	3/23/22 16:40	BRF
Propene	ND	8.0	1.8			ND	14	3.0	4	3/23/22 16:40	BRF
Styrene	0.15	0.20	0.11	J		0.65	0.85	0.45	4	3/23/22 16:40	BRF

ANALYTICAL RESULTS

Project Location: Roxy Cleaners

Date Received: 3/18/2022

Sample ID: 22C1325-02

Sample Matrix: Air

Sampled: 3/16/2022 10:12

Sample Description/Location:

Sub Description/Location:

Canister ID: 010208

Canister Size: 1.4 liter

Flow Controller ID: 010494

Sample Type: 24 hr

Work Order: 22C1325

Initial Vacuum(in Hg): -29

Final Vacuum(in Hg): -6

Receipt Vacuum(in Hg):

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	Results	ppbv			Flag/Qual	Results	ug/m3			Date/Time	
		RL	MDL				RL	MDL	Dilution	Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.20	0.11			ND	1.4	0.74	4	3/23/22 16:40	BRF
Tetrachloroethylene	0.34	0.20	0.15			2.3	1.4	1.0	4	3/23/22 16:40	BRF
Tetrahydrofuran	ND	2.0	0.33			ND	5.9	0.97	4	3/23/22 16:40	BRF
Toluene	9.1	0.20	0.11			34	0.75	0.43	4	3/23/22 16:40	BRF
1,2,4-Trichlorobenzene	ND	0.40	0.14	L-03, V-04, V-05		ND	3.0	1.0	4	3/23/22 16:40	BRF
1,1,1-Trichloroethane	ND	0.20	0.16			ND	1.1	0.86	4	3/23/22 16:40	BRF
1,1,2-Trichloroethane	ND	0.20	0.14			ND	1.1	0.77	4	3/23/22 16:40	BRF
Trichloroethylene	ND	0.20	0.13			ND	1.1	0.72	4	3/23/22 16:40	BRF
Trichlorofluoromethane (Freon 11)	0.68	0.80	0.24	J		3.8	4.5	1.3	4	3/23/22 16:40	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.80	0.22			ND	6.1	1.7	4	3/23/22 16:40	BRF
1,2,4-Trimethylbenzene	1.3	0.20	0.088			6.5	0.98	0.43	4	3/23/22 16:40	BRF
1,3,5-Trimethylbenzene	0.39	0.20	0.11			1.9	0.98	0.52	4	3/23/22 16:40	BRF
Vinyl Acetate	ND	4.0	1.1			ND	14	3.8	4	3/23/22 16:40	BRF
Vinyl Chloride	ND	0.20	0.18			ND	0.51	0.46	4	3/23/22 16:40	BRF
m&p-Xylene	5.5	0.40	0.22			24	1.7	0.97	4	3/23/22 16:40	BRF
o-Xylene	2.1	0.20	0.10			9.0	0.87	0.44	4	3/23/22 16:40	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	84.4	70-130	3/23/22 16:40
4-Bromofluorobenzene (1)	84.0	70-130	3/25/22 7:57
4-Bromofluorobenzene (1)	80.2	70-130	3/24/22 19:26

ANALYTICAL RESULTS

Project Location: Roxy Cleaners

Date Received: 3/18/2022

Sample ID: 22C1325-03

Sample Matrix: Air

Sampled: 3/16/2022 10:19

Sample Description/Location:

Sub Description/Location:

Canister ID: 12306

Canister Size: 1.4 liter

Flow Controller ID: 007100

Sample Type: 24 hr

Work Order: 22C1325

Initial Vacuum(in Hg): -30

Final Vacuum(in Hg): -4

Receipt Vacuum(in Hg):

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	ppbv				ug/m3				Date/Time	
	Results	RL	MDL	Flag/Qual	Results	RL	MDL	Dilution	Analyzed	Analyst
Acetone	4.3	1.4	0.84		10	3.3	2.0	0.698	3/23/22 16:16	BRF
Benzene	0.22	0.035	0.026		0.72	0.11	0.084	0.698	3/23/22 16:16	BRF
Benzyl chloride	ND	0.035	0.031		ND	0.18	0.16	0.698	3/23/22 16:16	BRF
Bromodichloromethane	ND	0.035	0.024		ND	0.23	0.16	0.698	3/23/22 16:16	BRF
Bromoform	ND	0.035	0.024		ND	0.36	0.25	0.698	3/23/22 16:16	BRF
Bromomethane	ND	0.035	0.028		ND	0.14	0.11	0.698	3/23/22 16:16	BRF
1,3-Butadiene	ND	0.035	0.029		ND	0.077	0.065	0.698	3/23/22 16:16	BRF
2-Butanone (MEK)	ND	1.4	0.37		ND	4.1	1.1	0.698	3/23/22 16:16	BRF
Carbon Disulfide	0.19	0.35	0.032	J	0.61	1.1	0.10	0.698	3/23/22 16:16	BRF
Carbon Tetrachloride	0.073	0.035	0.028		0.46	0.22	0.17	0.698	3/23/22 16:16	BRF
Chlorobenzene	ND	0.035	0.023		ND	0.16	0.11	0.698	3/23/22 16:16	BRF
Chloroethane	ND	0.035	0.025		ND	0.092	0.067	0.698	3/23/22 16:16	BRF
Chloroform	ND	0.035	0.033		ND	0.17	0.16	0.698	3/23/22 16:16	BRF
Chloromethane	0.63	0.070	0.028		1.3	0.14	0.057	0.698	3/23/22 16:16	BRF
Cyclohexane	ND	0.035	0.023		ND	0.12	0.079	0.698	3/23/22 16:16	BRF
Dibromochloromethane	ND	0.035	0.023		ND	0.30	0.20	0.698	3/23/22 16:16	BRF
1,2-Dibromoethane (EDB)	ND	0.035	0.021		ND	0.27	0.16	0.698	3/23/22 16:16	BRF
1,2-Dichlorobenzene	ND	0.035	0.020		ND	0.21	0.12	0.698	3/23/22 16:16	BRF
1,3-Dichlorobenzene	ND	0.035	0.019		ND	0.21	0.12	0.698	3/23/22 16:16	BRF
1,4-Dichlorobenzene	ND	0.035	0.023		ND	0.21	0.14	0.698	3/23/22 16:16	BRF
Dichlorodifluoromethane (Freon 12)	0.41	0.035	0.034		2.0	0.17	0.17	0.698	3/23/22 16:16	BRF
1,1-Dichloroethane	ND	0.035	0.030		ND	0.14	0.12	0.698	3/23/22 16:16	BRF
1,2-Dichloroethane	ND	0.035	0.032		ND	0.14	0.13	0.698	3/23/22 16:16	BRF
1,1-Dichloroethylene	ND	0.035	0.027		ND	0.14	0.11	0.698	3/23/22 16:16	BRF
cis-1,2-Dichloroethylene	ND	0.035	0.025		ND	0.14	0.10	0.698	3/23/22 16:16	BRF
trans-1,2-Dichloroethylene	ND	0.035	0.027		ND	0.14	0.11	0.698	3/23/22 16:16	BRF
1,2-Dichloropropane	ND	0.035	0.019		ND	0.16	0.087	0.698	3/23/22 16:16	BRF
cis-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.082	0.698	3/23/22 16:16	BRF
trans-1,3-Dichloropropene	ND	0.035	0.018		ND	0.16	0.081	0.698	3/23/22 16:16	BRF
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.035	0.034		ND	0.24	0.24	0.698	3/23/22 16:16	BRF
1,4-Dioxane	ND	0.35	0.029		ND	1.3	0.10	0.698	3/23/22 16:16	BRF
Ethanol	9.6	1.4	0.62	L-05, V-06	18	2.6	1.2	0.698	3/23/22 16:16	BRF
Ethyl Acetate	ND	0.35	0.18	L-03, V-05, V-34	ND	1.3	0.64	0.698	3/23/22 16:16	BRF
Ethylbenzene	0.043	0.035	0.020		0.18	0.15	0.088	0.698	3/23/22 16:16	BRF
4-Ethyltoluene	ND	0.035	0.021		ND	0.17	0.11	0.698	3/23/22 16:16	BRF
Heptane	0.067	0.035	0.022		0.27	0.14	0.091	0.698	3/23/22 16:16	BRF
Hexachlorobutadiene	ND	0.035	0.029	L-03	ND	0.37	0.31	0.698	3/23/22 16:16	BRF
Hexane	ND	1.4	0.18		ND	4.9	0.64	0.698	3/23/22 16:16	BRF
2-Hexanone (MBK)	ND	0.070	0.018		ND	0.29	0.072	0.698	3/23/22 16:16	BRF
Isopropanol	0.48	1.4	0.24	J	1.2	3.4	0.59	0.698	3/23/22 16:16	BRF
Methyl tert-Butyl Ether (MTBE)	ND	0.035	0.027		ND	0.13	0.097	0.698	3/23/22 16:16	BRF
Methylene Chloride	0.43	0.35	0.16		1.5	1.2	0.56	0.698	3/23/22 16:16	BRF
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.018		ND	0.14	0.073	0.698	3/23/22 16:16	BRF
Naphthalene	ND	0.035	0.022		ND	0.18	0.12	0.698	3/23/22 16:16	BRF
Propene	ND	1.4	0.31		ND	2.4	0.53	0.698	3/23/22 16:16	BRF
Styrene	ND	0.035	0.018		ND	0.15	0.078	0.698	3/23/22 16:16	BRF

ANALYTICAL RESULTS

Project Location: Roxy Cleaners

Date Received: 3/18/2022

Sample ID: 22C1325-03

Sample Matrix: Air

Sampled: 3/16/2022 10:19

Sample Description/Location:

Sub Description/Location:

Canister ID: 12306

Canister Size: 1.4 liter

Flow Controller ID: 007100

Sample Type: 24 hr

Work Order: 22C1325

Initial Vacuum(in Hg): -30

Final Vacuum(in Hg): -4

Receipt Vacuum(in Hg):

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	Results	ppbv			Flag/Qual	Results	ug/m3			Date/Time	
		RL	MDL				RL	MDL	Dilution	Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.035	0.019			ND	0.24	0.13	0.698	3/23/22 16:16	BRF
Tetrachloroethylene	ND	0.035	0.027			ND	0.24	0.18	0.698	3/23/22 16:16	BRF
Tetrahydrofuran	ND	0.35	0.057			ND	1.0	0.17	0.698	3/23/22 16:16	BRF
Toluene	0.43	0.035	0.020			1.6	0.13	0.075	0.698	3/23/22 16:16	BRF
1,2,4-Trichlorobenzene	ND	0.070	0.024	L-03, V-04, V-05		ND	0.52	0.18	0.698	3/23/22 16:16	BRF
1,1,1-Trichloroethane	ND	0.035	0.027			ND	0.19	0.15	0.698	3/23/22 16:16	BRF
1,1,2-Trichloroethane	ND	0.035	0.025			ND	0.19	0.13	0.698	3/23/22 16:16	BRF
Trichloroethylene	ND	0.035	0.024			ND	0.19	0.13	0.698	3/23/22 16:16	BRF
Trichlorofluoromethane (Freon 11)	0.20	0.14	0.041			1.1	0.78	0.23	0.698	3/23/22 16:16	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.064	0.14	0.039	J		0.49	1.1	0.30	0.698	3/23/22 16:16	BRF
1,2,4-Trimethylbenzene	0.058	0.035	0.015			0.28	0.17	0.076	0.698	3/23/22 16:16	BRF
1,3,5-Trimethylbenzene	ND	0.035	0.018			ND	0.17	0.091	0.698	3/23/22 16:16	BRF
Vinyl Acetate	ND	0.70	0.19			ND	2.5	0.66	0.698	3/23/22 16:16	BRF
Vinyl Chloride	ND	0.035	0.031			ND	0.089	0.080	0.698	3/23/22 16:16	BRF
m&p-Xylene	0.11	0.070	0.039			0.49	0.30	0.17	0.698	3/23/22 16:16	BRF
o-Xylene	0.064	0.035	0.018			0.28	0.15	0.078	0.698	3/23/22 16:16	BRF

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)	85.1	70-130	3/23/22 16:16
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ANALYTICAL RESULTS

Project Location: Roxy Cleaners

Date Received: 3/18/2022

Field Sample #: SV-01

Sample ID: 22C1325-04

Sample Matrix: Air

Sampled: 3/16/2022 10:24

Sample Description/Location:

Sub Description/Location:

Canister ID: 009210

Canister Size: 1.4 liter

Flow Controller ID: 009676

Sample Type: 24 hr

Work Order: 22C1325

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -3

Receipt Vacuum(in Hg):

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling: >20%

EPA TO-15

Analyte	Results	ppbv			Results	ug/m3			Date/Time	
		RL	MDL	Flag/Qual		RL	MDL	Dilution	Analyzed	Analyst
Acetone	99	8.0	4.8		240	19	11	4	3/23/22 17:05	BRF
Benzene	0.63	0.20	0.15		2.0	0.64	0.48	4	3/23/22 17:05	BRF
Benzyl chloride	ND	0.20	0.18		ND	1.0	0.91	4	3/23/22 17:05	BRF
Bromodichloromethane	ND	0.20	0.14		ND	1.3	0.94	4	3/23/22 17:05	BRF
Bromoform	ND	0.20	0.14		ND	2.1	1.4	4	3/23/22 17:05	BRF
Bromomethane	ND	0.20	0.16		ND	0.78	0.63	4	3/23/22 17:05	BRF
1,3-Butadiene	ND	0.20	0.17		ND	0.44	0.37	4	3/23/22 17:05	BRF
2-Butanone (MEK)	ND	8.0	2.1		ND	24	6.3	4	3/23/22 17:05	BRF
Carbon Disulfide	ND	2.0	0.18		ND	6.2	0.58	4	3/23/22 17:05	BRF
Carbon Tetrachloride	ND	0.20	0.16		ND	1.3	1.0	4	3/23/22 17:05	BRF
Chlorobenzene	ND	0.20	0.13		ND	0.92	0.61	4	3/23/22 17:05	BRF
Chloroethane	ND	0.20	0.15		ND	0.53	0.39	4	3/23/22 17:05	BRF
Chloroform	ND	0.20	0.19		ND	0.98	0.93	4	3/23/22 17:05	BRF
Chloromethane	0.72	0.40	0.16		1.5	0.83	0.33	4	3/23/22 17:05	BRF
Cyclohexane	0.59	0.20	0.13		2.0	0.69	0.46	4	3/23/22 17:05	BRF
Dibromochloromethane	ND	0.20	0.13		ND	1.7	1.1	4	3/23/22 17:05	BRF
1,2-Dibromoethane (EDB)	ND	0.20	0.12		ND	1.5	0.93	4	3/23/22 17:05	BRF
1,2-Dichlorobenzene	ND	0.20	0.11		ND	1.2	0.69	4	3/23/22 17:05	BRF
1,3-Dichlorobenzene	ND	0.20	0.11		ND	1.2	0.67	4	3/23/22 17:05	BRF
1,4-Dichlorobenzene	ND	0.20	0.13		ND	1.2	0.79	4	3/23/22 17:05	BRF
Dichlorodifluoromethane (Freon 12)	0.44	0.20	0.20		2.2	0.99	0.97	4	3/23/22 17:05	BRF
1,1-Dichloroethane	ND	0.20	0.17		ND	0.81	0.71	4	3/23/22 17:05	BRF
1,2-Dichloroethane	ND	0.20	0.18		ND	0.81	0.73	4	3/23/22 17:05	BRF
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/23/22 17:05	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/23/22 17:05	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/23/22 17:05	BRF
1,2-Dichloropropane	ND	0.20	0.11		ND	0.92	0.50	4	3/23/22 17:05	BRF
cis-1,3-Dichloropropene	ND	0.20	0.10		ND	0.91	0.47	4	3/23/22 17:05	BRF
trans-1,3-Dichloropropene	ND	0.20	0.10		ND	0.91	0.46	4	3/23/22 17:05	BRF
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.20	0.20		ND	1.4	1.4	4	3/23/22 17:05	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/23/22 17:05	BRF
Ethanol	460	60	26	L-05, V-06	860	110	50	30	3/25/22 8:21	BRF
Ethyl Acetate	ND	2.0	1.0	L-03, V-05, V-34	ND	7.2	3.6	4	3/23/22 17:05	BRF
Ethylbenzene	0.95	0.20	0.12		4.1	0.87	0.51	4	3/23/22 17:05	BRF
4-Ethyltoluene	0.25	0.20	0.12		1.2	0.98	0.60	4	3/23/22 17:05	BRF
Heptane	0.72	0.20	0.13		3.0	0.82	0.52	4	3/23/22 17:05	BRF
Hexachlorobutadiene	ND	0.20	0.16	L-03	ND	2.1	1.8	4	3/23/22 17:05	BRF
Hexane	ND	8.0	1.0		ND	28	3.7	4	3/23/22 17:05	BRF
2-Hexanone (MBK)	ND	0.40	0.10		ND	1.6	0.41	4	3/23/22 17:05	BRF
Isopropanol	14	8.0	1.4		33	20	3.4	4	3/23/22 17:05	BRF
Methyl tert-Butyl Ether (MTBE)	ND	0.20	0.15		ND	0.72	0.56	4	3/23/22 17:05	BRF
Methylene Chloride	ND	2.0	0.93		ND	6.9	3.2	4	3/23/22 17:05	BRF
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.10		ND	0.82	0.42	4	3/23/22 17:05	BRF
Naphthalene	ND	0.20	0.13		ND	1.0	0.66	4	3/23/22 17:05	BRF
Propene	ND	8.0	1.8		ND	14	3.0	4	3/23/22 17:05	BRF
Styrene	ND	0.20	0.11		ND	0.85	0.45	4	3/23/22 17:05	BRF

ANALYTICAL RESULTS

Project Location: Roxy Cleaners

Date Received: 3/18/2022

Field Sample #: SV-01

Sample ID: 22C1325-04

Sample Matrix: Air

Sampled: 3/16/2022 10:24

Sample Description/Location:

Sub Description/Location:

Canister ID: 009210

Canister Size: 1.4 liter

Flow Controller ID: 009676

Sample Type: 24 hr

Work Order: 22C1325

Initial Vacuum(in Hg): -28

Final Vacuum(in Hg): -3

Receipt Vacuum(in Hg):

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling: >20%

EPA TO-15

Analyte	Results	ppbv			Flag/Qual	Results	ug/m3			Date/Time	
		RL	MDL				RL	MDL	Dilution	Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.20	0.11			ND	1.4	0.74	4	3/23/22 17:05	BRF
Tetrachloroethylene	ND	0.20	0.15			ND	1.4	1.0	4	3/23/22 17:05	BRF
Tetrahydrofuran	ND	2.0	0.33			ND	5.9	0.97	4	3/23/22 17:05	BRF
Toluene	6.1	0.20	0.11			23	0.75	0.43	4	3/23/22 17:05	BRF
1,2,4-Trichlorobenzene	ND	0.40	0.14	L-03, V-04, V-05		ND	3.0	1.0	4	3/23/22 17:05	BRF
1,1,1-Trichloroethane	ND	0.20	0.16			ND	1.1	0.86	4	3/23/22 17:05	BRF
1,1,2-Trichloroethane	ND	0.20	0.14			ND	1.1	0.77	4	3/23/22 17:05	BRF
Trichloroethylene	ND	0.20	0.13			ND	1.1	0.72	4	3/23/22 17:05	BRF
Trichlorofluoromethane (Freon 11)	ND	0.80	0.24			ND	4.5	1.3	4	3/23/22 17:05	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.80	0.22			ND	6.1	1.7	4	3/23/22 17:05	BRF
1,2,4-Trimethylbenzene	ND	0.20	0.088			ND	0.98	0.43	4	3/23/22 17:05	BRF
1,3,5-Trimethylbenzene	0.24	0.20	0.11			1.2	0.98	0.52	4	3/23/22 17:05	BRF
Vinyl Acetate	ND	4.0	1.1			ND	14	3.8	4	3/23/22 17:05	BRF
Vinyl Chloride	ND	0.20	0.18			ND	0.51	0.46	4	3/23/22 17:05	BRF
m&p-Xylene	3.3	0.40	0.22			14	1.7	0.97	4	3/23/22 17:05	BRF
o-Xylene	1.3	0.20	0.10			5.6	0.87	0.44	4	3/23/22 17:05	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	77.8	70-130	3/25/22 8:21
4-Bromofluorobenzene (1)	83.5	70-130	3/23/22 17:05

ANALYTICAL RESULTS

Project Location: Roxy Cleaners

Date Received: 3/18/2022

Field Sample #: SV-04

Sample ID: 22C1325-07

Sample Matrix: Air

Sampled: 3/16/2022 11:15

Sample Description/Location:

Sub Description/Location:

Canister ID: 009046

Canister Size: 1.4 liter

Flow Controller ID: 010214

Sample Type: 24 hr

Work Order: 22C1325

Initial Vacuum(in Hg): -29.5

Final Vacuum(in Hg): -23

Receipt Vacuum(in Hg):

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	Results	ppbv			Results	ug/m3			Date/Time	
		RL	MDL	Flag/Qual		RL	MDL	Dilution	Analyzed	Analyst
Acetone	170	8.0	4.8		400	19	11	4	3/23/22 17:34	BRF
Benzene	0.73	0.20	0.15		2.3	0.64	0.48	4	3/23/22 17:34	BRF
Benzyl chloride	ND	0.20	0.18		ND	1.0	0.91	4	3/23/22 17:34	BRF
Bromodichloromethane	ND	0.20	0.14		ND	1.3	0.94	4	3/23/22 17:34	BRF
Bromoform	ND	0.20	0.14		ND	2.1	1.4	4	3/23/22 17:34	BRF
Bromomethane	ND	0.20	0.16		ND	0.78	0.63	4	3/23/22 17:34	BRF
1,3-Butadiene	ND	0.20	0.17		ND	0.44	0.37	4	3/23/22 17:34	BRF
2-Butanone (MEK)	ND	8.0	2.1		ND	24	6.3	4	3/23/22 17:34	BRF
Carbon Disulfide	ND	2.0	0.18		ND	6.2	0.58	4	3/23/22 17:34	BRF
Carbon Tetrachloride	ND	0.20	0.16		ND	1.3	1.0	4	3/23/22 17:34	BRF
Chlorobenzene	ND	0.20	0.13		ND	0.92	0.61	4	3/23/22 17:34	BRF
Chloroethane	ND	0.20	0.15		ND	0.53	0.39	4	3/23/22 17:34	BRF
Chloroform	ND	0.20	0.19		ND	0.98	0.93	4	3/23/22 17:34	BRF
Chloromethane	0.91	0.40	0.16		1.9	0.83	0.33	4	3/23/22 17:34	BRF
Cyclohexane	0.96	0.20	0.13		3.3	0.69	0.46	4	3/23/22 17:34	BRF
Dibromochloromethane	ND	0.20	0.13		ND	1.7	1.1	4	3/23/22 17:34	BRF
1,2-Dibromoethane (EDB)	ND	0.20	0.12		ND	1.5	0.93	4	3/23/22 17:34	BRF
1,2-Dichlorobenzene	ND	0.20	0.11		ND	1.2	0.69	4	3/23/22 17:34	BRF
1,3-Dichlorobenzene	ND	0.20	0.11		ND	1.2	0.67	4	3/23/22 17:34	BRF
1,4-Dichlorobenzene	ND	0.20	0.13		ND	1.2	0.79	4	3/23/22 17:34	BRF
Dichlorodifluoromethane (Freon 12)	0.42	0.20	0.20		2.1	0.99	0.97	4	3/23/22 17:34	BRF
1,1-Dichloroethane	ND	0.20	0.17		ND	0.81	0.71	4	3/23/22 17:34	BRF
1,2-Dichloroethane	ND	0.20	0.18		ND	0.81	0.73	4	3/23/22 17:34	BRF
1,1-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.60	4	3/23/22 17:34	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15		ND	0.79	0.58	4	3/23/22 17:34	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16		ND	0.79	0.62	4	3/23/22 17:34	BRF
1,2-Dichloropropane	ND	0.20	0.11		ND	0.92	0.50	4	3/23/22 17:34	BRF
cis-1,3-Dichloropropene	ND	0.20	0.10		ND	0.91	0.47	4	3/23/22 17:34	BRF
trans-1,3-Dichloropropene	ND	0.20	0.10		ND	0.91	0.46	4	3/23/22 17:34	BRF
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.20	0.20		ND	1.4	1.4	4	3/23/22 17:34	BRF
1,4-Dioxane	ND	2.0	0.17		ND	7.2	0.60	4	3/23/22 17:34	BRF
Ethanol	900	40	18	L-05, V-06	1700	75	33	20	3/25/22 8:46	BRF
Ethyl Acetate	1.1	2.0	1.0	J, L-03, V-05, V-34	3.9	7.2	3.6	4	3/23/22 17:34	BRF
Ethylbenzene	0.83	0.20	0.12		3.6	0.87	0.51	4	3/23/22 17:34	BRF
4-Ethyltoluene	0.20	0.20	0.12	J	0.96	0.98	0.60	4	3/23/22 17:34	BRF
Heptane	0.91	0.20	0.13		3.7	0.82	0.52	4	3/23/22 17:34	BRF
Hexachlorobutadiene	ND	0.20	0.16	L-03	ND	2.1	1.8	4	3/23/22 17:34	BRF
Hexane	ND	8.0	1.0		ND	28	3.7	4	3/23/22 17:34	BRF
2-Hexanone (MBK)	ND	0.40	0.10		ND	1.6	0.41	4	3/23/22 17:34	BRF
Isopropanol	22	8.0	1.4		55	20	3.4	4	3/23/22 17:34	BRF
Methyl tert-Butyl Ether (MTBE)	ND	0.20	0.15		ND	0.72	0.56	4	3/23/22 17:34	BRF
Methylene Chloride	ND	2.0	0.93		ND	6.9	3.2	4	3/23/22 17:34	BRF
4-Methyl-2-pentanone (MIBK)	ND	0.20	0.10		ND	0.82	0.42	4	3/23/22 17:34	BRF
Naphthalene	ND	0.20	0.13		ND	1.0	0.66	4	3/23/22 17:34	BRF
Propene	3.7	8.0	1.8	J	6.4	14	3.0	4	3/23/22 17:34	BRF
Styrene	ND	0.20	0.11		ND	0.85	0.45	4	3/23/22 17:34	BRF

ANALYTICAL RESULTS

Project Location: Roxy Cleaners

Date Received: 3/18/2022

Field Sample #: SV-04

Sample ID: 22C1325-07

Sample Matrix: Air

Sampled: 3/16/2022 11:15

Sample Description/Location:

Sub Description/Location:

Canister ID: 009046

Canister Size: 1.4 liter

Flow Controller ID: 010214

Sample Type: 24 hr

Work Order: 22C1325

Initial Vacuum(in Hg): -29.5

Final Vacuum(in Hg): -23

Receipt Vacuum(in Hg):

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling: <20%

EPA TO-15

Analyte	Results	ppbv			Flag/Qual	Results	ug/m3			Date/Time	
		RL	MDL				RL	MDL	Dilution	Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.20	0.11			ND	1.4	0.74	4	3/23/22 17:34	BRF
Tetrachloroethylene	ND	0.20	0.15			ND	1.4	1.0	4	3/23/22 17:34	BRF
Tetrahydrofuran	ND	2.0	0.33			ND	5.9	0.97	4	3/23/22 17:34	BRF
Toluene	6.0	0.20	0.11			23	0.75	0.43	4	3/23/22 17:34	BRF
1,2,4-Trichlorobenzene	ND	0.40	0.14	L-03, V-04, V-05		ND	3.0	1.0	4	3/23/22 17:34	BRF
1,1,1-Trichloroethane	ND	0.20	0.16			ND	1.1	0.86	4	3/23/22 17:34	BRF
1,1,2-Trichloroethane	ND	0.20	0.14			ND	1.1	0.77	4	3/23/22 17:34	BRF
Trichloroethylene	ND	0.20	0.13			ND	1.1	0.72	4	3/23/22 17:34	BRF
Trichlorofluoromethane (Freon 11)	ND	0.80	0.24			ND	4.5	1.3	4	3/23/22 17:34	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.80	0.22			ND	6.1	1.7	4	3/23/22 17:34	BRF
1,2,4-Trimethylbenzene	ND	0.20	0.088			ND	0.98	0.43	4	3/23/22 17:34	BRF
1,3,5-Trimethylbenzene	0.16	0.20	0.11	J		0.77	0.98	0.52	4	3/23/22 17:34	BRF
Vinyl Acetate	ND	4.0	1.1			ND	14	3.8	4	3/23/22 17:34	BRF
Vinyl Chloride	ND	0.20	0.18			ND	0.51	0.46	4	3/23/22 17:34	BRF
m&p-Xylene	2.8	0.40	0.22			12	1.7	0.97	4	3/23/22 17:34	BRF
o-Xylene	1.1	0.20	0.10			5.0	0.87	0.44	4	3/23/22 17:34	BRF

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	82.7	70-130	3/25/22 8:46
4-Bromofluorobenzene (1)	86.0	70-130	3/23/22 17:34

ANALYTICAL RESULTS

Project Location: Roxy Cleaners

Date Received: 3/18/2022

Field Sample #: SV-05

Sample ID: 22C1325-08

Sample Matrix: Air

Sampled: 3/16/2022 10:51

Sample Description/Location:

Sub Description/Location:

Canister ID: 010234

Canister Size: 1.4 liter

Flow Controller ID: 010181

Sample Type: 24 hr

Work Order: 22C1325

Initial Vacuum(in Hg): -24

Final Vacuum(in Hg): 0

Receipt Vacuum(in Hg):

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling: <20%

EPA TO-15

Sample Flags: Z-01

Analyte	Results	ppbv			Flag/Qual	Results	ug/m3			Date/Time	
		RL	MDL				RL	MDL	Dilution	Analyzed	Analyst
Acetone	6.3	8.0	4.8	J		15	19	11	4	3/23/22 17:58	BRF
Benzene	0.29	0.20	0.15			0.93	0.64	0.48	4	3/23/22 17:58	BRF
Benzyl chloride	ND	0.20	0.18			ND	1.0	0.91	4	3/23/22 17:58	BRF
Bromodichloromethane	ND	0.20	0.14			ND	1.3	0.94	4	3/23/22 17:58	BRF
Bromoform	ND	0.20	0.14			ND	2.1	1.4	4	3/23/22 17:58	BRF
Bromomethane	ND	0.20	0.16			ND	0.78	0.63	4	3/23/22 17:58	BRF
1,3-Butadiene	ND	0.20	0.17			ND	0.44	0.37	4	3/23/22 17:58	BRF
2-Butanone (MEK)	ND	8.0	2.1			ND	24	6.3	4	3/23/22 17:58	BRF
Carbon Disulfide	ND	2.0	0.18			ND	6.2	0.58	4	3/23/22 17:58	BRF
Carbon Tetrachloride	ND	0.20	0.16			ND	1.3	1.0	4	3/23/22 17:58	BRF
Chlorobenzene	ND	0.20	0.13			ND	0.92	0.61	4	3/23/22 17:58	BRF
Chloroethane	ND	0.20	0.15			ND	0.53	0.39	4	3/23/22 17:58	BRF
Chloroform	ND	0.20	0.19			ND	0.98	0.93	4	3/23/22 17:58	BRF
Chloromethane	0.59	0.40	0.16			1.2	0.83	0.33	4	3/23/22 17:58	BRF
Cyclohexane	ND	0.20	0.13			ND	0.69	0.46	4	3/23/22 17:58	BRF
Dibromochloromethane	ND	0.20	0.13			ND	1.7	1.1	4	3/23/22 17:58	BRF
1,2-Dibromoethane (EDB)	ND	0.20	0.12			ND	1.5	0.93	4	3/23/22 17:58	BRF
1,2-Dichlorobenzene	ND	0.20	0.11			ND	1.2	0.69	4	3/23/22 17:58	BRF
1,3-Dichlorobenzene	ND	0.20	0.11			ND	1.2	0.67	4	3/23/22 17:58	BRF
1,4-Dichlorobenzene	ND	0.20	0.13			ND	1.2	0.79	4	3/23/22 17:58	BRF
Dichlorodifluoromethane (Freon 12)	0.46	0.20	0.20			2.3	0.99	0.97	4	3/23/22 17:58	BRF
1,1-Dichloroethane	ND	0.20	0.17			ND	0.81	0.71	4	3/23/22 17:58	BRF
1,2-Dichloroethane	ND	0.20	0.18			ND	0.81	0.73	4	3/23/22 17:58	BRF
1,1-Dichloroethylene	ND	0.20	0.15			ND	0.79	0.60	4	3/23/22 17:58	BRF
cis-1,2-Dichloroethylene	ND	0.20	0.15			ND	0.79	0.58	4	3/23/22 17:58	BRF
trans-1,2-Dichloroethylene	ND	0.20	0.16			ND	0.79	0.62	4	3/23/22 17:58	BRF
1,2-Dichloropropane	ND	0.20	0.11			ND	0.92	0.50	4	3/23/22 17:58	BRF
cis-1,3-Dichloropropene	ND	0.20	0.10			ND	0.91	0.47	4	3/23/22 17:58	BRF
trans-1,3-Dichloropropene	ND	0.20	0.10			ND	0.91	0.46	4	3/23/22 17:58	BRF
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.20	0.20			ND	1.4	1.4	4	3/23/22 17:58	BRF
1,4-Dioxane	ND	2.0	0.17			ND	7.2	0.60	4	3/23/22 17:58	BRF
Ethanol	18	8.0	3.5	L-05, V-06		34	15	6.6	4	3/23/22 17:58	BRF
Ethyl Acetate	ND	2.0	1.0	L-03, V-05, V-34		ND	7.2	3.6	4	3/23/22 17:58	BRF
Ethylbenzene	ND	0.20	0.12			ND	0.87	0.51	4	3/23/22 17:58	BRF
4-Ethyltoluene	ND	0.20	0.12			ND	0.98	0.60	4	3/23/22 17:58	BRF
Heptane	0.24	0.20	0.13			1.00	0.82	0.52	4	3/23/22 17:58	BRF
Hexachlorobutadiene	ND	0.20	0.16	L-03		ND	2.1	1.8	4	3/23/22 17:58	BRF
Hexane	ND	8.0	1.0			ND	28	3.7	4	3/23/22 17:58	BRF
2-Hexanone (MBK)	ND	0.40	0.10			ND	1.6	0.41	4	3/23/22 17:58	BRF
Isopropanol	ND	8.0	1.4			ND	20	3.4	4	3/23/22 17:58	BRF
Methyl tert-Butyl Ether (MTBE)	ND	0.20	0.15			ND	0.72	0.56	4	3/23/22 17:58	BRF
Methylene Chloride	ND	2.0	0.93			ND	6.9	3.2	4	3/23/22 17:58	BRF
4-Methyl-2-pentanone (MIBK)	2.2	0.20	0.10			8.9	0.82	0.42	4	3/23/22 17:58	BRF
Naphthalene	ND	0.20	0.13			ND	1.0	0.66	4	3/23/22 17:58	BRF
Propene	ND	8.0	1.8			ND	14	3.0	4	3/23/22 17:58	BRF
Styrene	ND	0.20	0.11			ND	0.85	0.45	4	3/23/22 17:58	BRF

ANALYTICAL RESULTS

Project Location: Roxy Cleaners

Date Received: 3/18/2022

Field Sample #: SV-05

Sample ID: 22C1325-08

Sample Matrix: Air

Sampled: 3/16/2022 10:51

Sample Description/Location:

Sub Description/Location:

Canister ID: 010234

Canister Size: 1.4 liter

Flow Controller ID: 010181

Sample Type: 24 hr

Work Order: 22C1325

Initial Vacuum(in Hg): -24

Final Vacuum(in Hg): 0

Receipt Vacuum(in Hg):

Flow Controller Type: Fixed-Orifice

Flow Controller Calibration

RPD Pre and Post-Sampling: <20%

EPA TO-15

Sample Flags: Z-01

Analyte	Results	ppbv			Flag/Qual	Results	ug/m3			Date/Time	
		RL	MDL				RL	MDL	Dilution	Analyzed	Analyst
1,1,2,2-Tetrachloroethane	ND	0.20	0.11			ND	1.4	0.74	4	3/23/22 17:58	BRF
Tetrachloroethylene	ND	0.20	0.15			ND	1.4	1.0	4	3/23/22 17:58	BRF
Tetrahydrofuran	ND	2.0	0.33			ND	5.9	0.97	4	3/23/22 17:58	BRF
Toluene	0.58	0.20	0.11			2.2	0.75	0.43	4	3/23/22 17:58	BRF
1,2,4-Trichlorobenzene	ND	0.40	0.14	L-03, V-04, V-05		ND	3.0	1.0	4	3/23/22 17:58	BRF
1,1,1-Trichloroethane	ND	0.20	0.16			ND	1.1	0.86	4	3/23/22 17:58	BRF
1,1,2-Trichloroethane	ND	0.20	0.14			ND	1.1	0.77	4	3/23/22 17:58	BRF
Trichloroethylene	ND	0.20	0.13			ND	1.1	0.72	4	3/23/22 17:58	BRF
Trichlorofluoromethane (Freon 11)	ND	0.80	0.24			ND	4.5	1.3	4	3/23/22 17:58	BRF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.80	0.22			ND	6.1	1.7	4	3/23/22 17:58	BRF
1,2,4-Trimethylbenzene	ND	0.20	0.088			ND	0.98	0.43	4	3/23/22 17:58	BRF
1,3,5-Trimethylbenzene	ND	0.20	0.11			ND	0.98	0.52	4	3/23/22 17:58	BRF
Vinyl Acetate	ND	4.0	1.1			ND	14	3.8	4	3/23/22 17:58	BRF
Vinyl Chloride	ND	0.20	0.18			ND	0.51	0.46	4	3/23/22 17:58	BRF
m&p-Xylene	ND	0.40	0.22			ND	1.7	0.97	4	3/23/22 17:58	BRF
o-Xylene	ND	0.20	0.10			ND	0.87	0.44	4	3/23/22 17:58	BRF

Surrogates

% Recovery

% REC Limits

4-Bromofluorobenzene (1)	83.1	70-130	3/23/22 17:58
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Sample Extraction Data
Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22C1325-01 [IA-[REDACTED]	B304046	1.5	1	N/A	1000	200	430	03/23/22
22C1325-01RE1 [IA-[REDACTED]	B304046	1.5	1	N/A	1000	200	15	03/23/22
22C1325-02 [SV-[REDACTED]	B304046	1.5	1	N/A	1000	200	75	03/23/22
22C1325-03 [OA-[REDACTED]	B304046	1.5	1	N/A	1000	200	430	03/23/22
22C1325-04 [SV-01]	B304046	1.5	1	N/A	1000	200	75	03/23/22
22C1325-07 [SV-04]	B304046	4	1	N/A	1000	200	200	03/23/22
22C1325-08 [SV-05]	B304046	1.5	1	N/A	1000	200	75	03/23/22

Prep Method: TO-15 Prep-EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
22C1325-02RE1 [SV-[REDACTED]	B304148	1.5	1	N/A	1000	200	30	03/24/22
22C1325-02RE2 [SV-[REDACTED]	B304148	1.5	200	5	1000	200	200	03/24/22
22C1325-04RE1 [SV-01]	B304148	1.5	1	N/A	1000	200	10	03/24/22
22C1325-07RE1 [SV-04]	B304148	4	1	N/A	1000	200	40	03/24/22

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	RL	ug/m3 Results	RL	Spike Level ppbv	Source Result	%REC	%REC Limits	RPD RPD	RPD Limit	Flag/Qual
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Batch B304046 - TO-15 Prep

Blank (B304046-BLK1)	Prepared & Analyzed: 03/23/22									
Acetone	ND	0.80								
Benzene	ND	0.020								
Benzyl chloride	ND	0.020								
Bromodichloromethane	ND	0.020								
Bromoform	ND	0.020								
Bromomethane	ND	0.020								
1,3-Butadiene	ND	0.020								
2-Butanone (MEK)	ND	0.80								
Carbon Disulfide	ND	0.20								
Carbon Tetrachloride	ND	0.020								
Chlorobenzene	ND	0.020								
Chloroethane	ND	0.020								
Chloroform	ND	0.020								
Chloromethane	ND	0.040								
Cyclohexane	ND	0.020								
Dibromochloromethane	ND	0.020								
1,2-Dibromoethane (EDB)	ND	0.020								
1,2-Dichlorobenzene	ND	0.020								
1,3-Dichlorobenzene	ND	0.020								
1,4-Dichlorobenzene	ND	0.020								
Dichlorodifluoromethane (Freon 12)	ND	0.020								
1,1-Dichloroethane	ND	0.020								
1,2-Dichloroethane	ND	0.020								
1,1-Dichloroethylene	ND	0.020								
cis-1,2-Dichloroethylene	ND	0.020								
trans-1,2-Dichloroethylene	ND	0.020								
1,2-Dichloroproppane	ND	0.020								
cis-1,3-Dichloropropene	ND	0.020								
trans-1,3-Dichloropropene	ND	0.020								
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.020								
1,4-Dioxane	ND	0.20								
Ethanol	ND	0.80								L-05, V-06
Ethyl Acetate	ND	0.20								L-03, V-05,
Ethylbenzene	ND	0.020								
4-Ethyltoluene	ND	0.020								
Heptane	ND	0.020								
Hexachlorobutadiene	ND	0.020								L-03
Hexane	ND	0.80								
2-Hexanone (MBK)	ND	0.020								
Isopropanol	ND	0.80								
Methyl tert-Butyl Ether (MTBE)	ND	0.020								
Methylene Chloride	ND	0.20								
4-Methyl-2-pentanone (MIBK)	ND	0.020								
Naphthalene	ND	0.020								
Propene	ND	0.80								

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	RL	ug/m3 Results	RL	Spike Level ppbv	Source Result	%REC %REC	RPD Limits	RPD RPD	RPD Limit	Flag/Qual
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Batch B304046 - TO-15 Prep

Blank (B304046-BLK1)	Prepared & Analyzed: 03/23/22						
Styrene	ND	0.020					
1,1,2,2-Tetrachloroethane	ND	0.020					
Tetrachloroethylene	ND	0.020					
Tetrahydrofuran	ND	0.20					
Toluene	ND	0.020					
1,2,4-Trichlorobenzene	ND	0.020					
1,1,1-Trichloroethane	ND	0.020					
1,1,2-Trichloroethane	ND	0.020					
Trichloroethylene	ND	0.020					
Trichlorofluoromethane (Freon 11)	ND	0.080					
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.080					
1,2,4-Trimethylbenzene	ND	0.020					
1,3,5-Trimethylbenzene	ND	0.020					
Vinyl Acetate	ND	0.40					
Vinyl Chloride	ND	0.020					
m&p-Xylene	ND	0.040					
o-Xylene	ND	0.020					
<i>Surrogate: 4-Bromofluorobenzene (I)</i>	6.78		8.00		84.8		70-130

LCS (B304046-BS1)	Prepared & Analyzed: 03/23/22						
Acetone	4.50		5.00		90.0		70-130
Benzene	5.95		5.00		119		70-130
Benzyl chloride	5.28		5.00		106		70-130
Bromodichloromethane	5.31		5.00		106		70-130
Bromoform	4.95		5.00		98.9		70-130
Bromomethane	4.64		5.00		92.9		70-130
1,3-Butadiene	4.74		5.00		94.8		70-130
2-Butanone (MEK)	4.46		5.00		89.1		70-130
Carbon Disulfide	5.38		5.00		108		70-130
Carbon Tetrachloride	4.72		5.00		94.3		70-130
Chlorobenzene	5.22		5.00		104		70-130
Chloroethane	5.19		5.00		104		70-130
Chloroform	4.34		5.00		86.8		70-130
Chloromethane	5.04		5.00		101		70-130
Cyclohexane	5.06		5.00		101		70-130
Dibromochloromethane	5.15		5.00		103		70-130
1,2-Dibromoethane (EDB)	5.40		5.00		108		70-130
1,2-Dichlorobenzene	4.97		5.00		99.3		70-130
1,3-Dichlorobenzene	5.22		5.00		104		70-130
1,4-Dichlorobenzene	4.94		5.00		98.7		70-130
Dichlorodifluoromethane (Freon 12)	4.32		5.00		86.5		70-130
1,1-Dichloroethane	4.60		5.00		91.9		70-130
1,2-Dichloroethane	4.14		5.00		82.7		70-130
1,1-Dichloroethylene	5.29		5.00		106		70-130
cis-1,2-Dichloroethylene	4.49		5.00		89.8		70-130

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	RL	ug/m3 Results	RL	Spike Level ppbv	Source Result	%REC %REC	Limits	RPD RPD	Limit	Flag/Qual
Batch B304046 - TO-15 Prep											
LCS (B304046-BS1)											
Prepared & Analyzed: 03/23/22											
trans-1,2-Dichloroethylene	4.44		5.00		88.8	70-130					
1,2-Dichloropropane	5.55		5.00		111	70-130					
cis-1,3-Dichloropropene	5.54		5.00		111	70-130					
trans-1,3-Dichloropropene	5.58		5.00		112	70-130					
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.43		5.00		88.6	70-130					
1,4-Dioxane	5.45		5.00		109	70-130					
Ethanol	6.58		5.00		132 *	70-130				L-05, V-06	
Ethyl Acetate	3.26		5.00		65.2 *	70-130				L-03, V-05,	
Ethylbenzene	5.24		5.00		105	70-130					
4-Ethyltoluene	5.21		5.00		104	70-130					
Heptane	5.63		5.00		113	70-130					
Hexachlorobutadiene	3.23		5.00		64.6 *	70-130					L-03
Hexane	4.55		5.00		91.1	70-130					
2-Hexanone (MBK)	6.61		5.00		132 *	70-130					L-01
Isopropanol	4.32		5.00		86.3	70-130					
Methyl tert-Butyl Ether (MTBE)	3.86		5.00		77.2	70-130					
Methylene Chloride	5.42		5.00		108	70-130					
4-Methyl-2-pentanone (MIBK)	6.18		5.00		124	70-130					
Naphthalene	4.08		5.00		81.6	70-130					
Propene	4.25		5.00		85.0	70-130					
Styrene	5.36		5.00		107	70-130					
1,1,2,2-Tetrachloroethane	6.07		5.00		121	70-130					
Tetrachloroethylene	4.52		5.00		90.3	70-130					
Tetrahydrofuran	4.08		5.00		81.6	70-130					
Toluene	5.28		5.00		106	70-130					
1,2,4-Trichlorobenzene	2.93		5.00		58.6 *	70-130					L-03, V-04,
1,1,1-Trichloroethane	4.66		5.00		93.2	70-130					
1,1,2-Trichloroethane	5.57		5.00		111	70-130					
Trichloroethylene	5.12		5.00		102	70-130					
Trichlorofluoromethane (Freon 11)	4.54		5.00		90.7	70-130					
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.95		5.00		98.9	70-130					
1,2,4-Trimethylbenzene	4.85		5.00		97.1	70-130					
1,3,5-Trimethylbenzene	5.12		5.00		102	70-130					
Vinyl Acetate	6.01		5.00		120	70-130					V-36
Vinyl Chloride	5.32		5.00		106	70-130					
m&p-Xylene	11.0		10.0		110	70-130					
o-Xylene	5.29		5.00		106	70-130					
Surrogate: 4-Bromofluorobenzene (I)	7.30		8.00		91.3	70-130					

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	RL	ug/m3 Results	RL	Spike Level ppbv	Source Result	%REC %REC	Limits	RPD RPD	RPD Limit	Flag/Qual
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Batch B304148 - TO-15 Prep
Blank (B304148-BLK1) Prepared & Analyzed: 03/24/22

Acetone	ND	0.80									
Benzene	ND	0.020									
Benzyl chloride	ND	0.020									
Bromodichloromethane	ND	0.020									
Bromoform	ND	0.020									
Bromomethane	ND	0.020									
1,3-Butadiene	ND	0.020									
2-Butanone (MEK)	ND	0.80									
Carbon Disulfide	ND	0.20									
Carbon Tetrachloride	ND	0.020									
Chlorobenzene	ND	0.020									
Chloroethane	ND	0.020									
Chloroform	ND	0.020									
Chloromethane	ND	0.040									
Cyclohexane	ND	0.020									
Dibromochloromethane	ND	0.020									
1,2-Dibromoethane (EDB)	ND	0.020									
1,2-Dichlorobenzene	ND	0.020									
1,3-Dichlorobenzene	ND	0.020									
1,4-Dichlorobenzene	ND	0.020									
Dichlorodifluoromethane (Freon 12)	ND	0.020									
1,1-Dichloroethane	ND	0.020									
1,2-Dichloroethane	ND	0.020									
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,2-Dichloropropane	ND	0.020									
cis-1,3-Dichloropropene	ND	0.020									
trans-1,3-Dichloropropene	ND	0.020									
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.020									
1,4-Dioxane	ND	0.20									
Ethanol	ND	0.80									
Ethyl Acetate	ND	0.20									L-03, V-05,
Ethylbenzene	ND	0.020									
4-Ethyltoluene	ND	0.020									
Heptane	ND	0.020									
Hexachlorobutadiene	ND	0.020									L-03
Hexane	ND	0.80									
2-Hexanone (MBK)	ND	0.020									
Isopropanol	ND	0.80									
Methyl tert-Butyl Ether (MTBE)	ND	0.020									
Methylene Chloride	ND	0.20									
4-Methyl-2-pentanone (MIBK)	ND	0.020									
Naphthalene	ND	0.020									
Propene	ND	0.80									

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	RL	ug/m3 Results	RL	Spike Level ppbv	Source Result	%REC %REC	RPD Limits	RPD RPD	RPD Limit	Flag/Qual
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Batch B304148 - TO-15 Prep

Blank (B304148-BLK1)	Prepared & Analyzed: 03/24/22						
Styrene	ND	0.020					
1,1,2,2-Tetrachloroethane	ND	0.020					
Tetrachloroethylene	ND	0.020					
Tetrahydrofuran	ND	0.20					
Toluene	ND	0.020					
1,2,4-Trichlorobenzene	ND	0.020					
1,1,1-Trichloroethane	ND	0.020					
1,1,2-Trichloroethane	ND	0.020					
Trichloroethylene	ND	0.020					
Trichlorofluoromethane (Freon 11)	ND	0.080					
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.080					
1,2,4-Trimethylbenzene	ND	0.020					
1,3,5-Trimethylbenzene	ND	0.020					
Vinyl Acetate	ND	0.40					
Vinyl Chloride	ND	0.020					
m&p-Xylene	ND	0.040					
o-Xylene	ND	0.020					
<i>Surrogate: 4-Bromofluorobenzene (I)</i>	6.76		8.00		84.5		70-130

LCS (B304148-BS1)	Prepared & Analyzed: 03/24/22						
Acetone	4.77		5.00		95.4		70-130
Benzene	6.31		5.00		126		70-130
Benzyl chloride	5.55		5.00		111		70-130
Bromodichloromethane	5.62		5.00		112		70-130
Bromoform	5.28		5.00		106		70-130
Bromomethane	4.93		5.00		98.6		70-130
1,3-Butadiene	4.96		5.00		99.1		70-130
2-Butanone (MEK)	4.34		5.00		86.8		70-130
Carbon Disulfide	5.68		5.00		114		70-130
Carbon Tetrachloride	4.97		5.00		99.5		70-130
Chlorobenzene	5.43		5.00		109		70-130
Chloroethane	5.43		5.00		109		70-130
Chloroform	4.58		5.00		91.6		70-130
Chloromethane	5.20		5.00		104		70-130
Cyclohexane	5.30		5.00		106		70-130
Dibromochloromethane	5.52		5.00		110		70-130
1,2-Dibromoethane (EDB)	5.82		5.00		116		70-130
1,2-Dichlorobenzene	5.17		5.00		103		70-130
1,3-Dichlorobenzene	5.57		5.00		111		70-130
1,4-Dichlorobenzene	5.19		5.00		104		70-130
Dichlorodifluoromethane (Freon 12)	4.49		5.00		89.7		70-130
1,1-Dichloroethane	4.71		5.00		94.3		70-130
1,2-Dichloroethane	4.26		5.00		85.2		70-130
1,1-Dichloroethylene	5.59		5.00		112		70-130
cis-1,2-Dichloroethylene	4.59		5.00		91.8		70-130

QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv Results	RL	ug/m3 Results	RL	Spike Level ppbv	Source Result	%REC %REC	Limits	RPD RPD	Limit	Flag/Qual
Batch B304148 - TO-15 Prep											
LCS (B304148-BS1)											
Prepared & Analyzed: 03/24/22											
trans-1,2-Dichloroethylene	4.47		5.00		89.4	70-130					
1,2-Dichloropropane	5.99		5.00		120	70-130					
cis-1,3-Dichloropropene	5.78		5.00		116	70-130					
trans-1,3-Dichloropropene	5.78		5.00		116	70-130					
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	4.60		5.00		92.0	70-130					
1,4-Dioxane	5.68		5.00		114	70-130					
Ethanol	6.94		5.00		139 *	70-130				L-05, V-06	
Ethyl Acetate	3.35		5.00		66.9 *	70-130				L-03, V-05,	
Ethylbenzene	5.52		5.00		110	70-130					
4-Ethyltoluene	5.58		5.00		112	70-130					
Heptane	6.07		5.00		121	70-130					
Hexachlorobutadiene	3.40		5.00		68.0 *	70-130					L-03
Hexane	4.69		5.00		93.8	70-130					
2-Hexanone (MBK)	6.98		5.00		140 *	70-130					L-01
Isopropanol	4.42		5.00		88.5	70-130					
Methyl tert-Butyl Ether (MTBE)	3.94		5.00		78.8	70-130					
Methylene Chloride	5.76		5.00		115	70-130					
4-Methyl-2-pentanone (MIBK)	6.49		5.00		130	70-130					V-20
Naphthalene	4.21		5.00		84.2	70-130					
Propene	4.32		5.00		86.4	70-130					
Styrene	5.56		5.00		111	70-130					
1,1,2,2-Tetrachloroethane	6.50		5.00		130	70-130					
Tetrachloroethylene	4.74		5.00		94.9	70-130					
Tetrahydrofuran	4.13		5.00		82.6	70-130					
Toluene	5.59		5.00		112	70-130					
1,2,4-Trichlorobenzene	3.13		5.00		62.6 *	70-130					L-03, V-04,
1,1,1-Trichloroethane	4.96		5.00		99.1	70-130					
1,1,2-Trichloroethane	5.87		5.00		117	70-130					
Trichloroethylene	5.37		5.00		107	70-130					
Trichlorofluoromethane (Freon 11)	4.69		5.00		93.9	70-130					
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	5.28		5.00		106	70-130					
1,2,4-Trimethylbenzene	5.15		5.00		103	70-130					
1,3,5-Trimethylbenzene	5.38		5.00		108	70-130					
Vinyl Acetate	6.15		5.00		123	70-130					V-36
Vinyl Chloride	5.49		5.00		110	70-130					
m&p-Xylene	11.6		10.0		116	70-130					
o-Xylene	5.68		5.00		114	70-130					
Surrogate: 4-Bromofluorobenzene (I)	7.39		8.00		92.4	70-130					

Note: Blank Subtraction is not performed unless otherwise noted

FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
RL	Reporting Limit
MDL	Method Detection Limit
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
LCS Dup	Duplicate Laboratory Control Sample
MS	Matrix Spike Sample
MS Dup	Duplicate Matrix Spike Sample
REC	Recovery
QC	Quality Control
ppbv	Parts per billion volume
EPA	United States Environmental Protection Agency
% REC	Percent Recovery
ND	Not Detected
N/A	Not Applicable
DL	Detection Limit
NC	Not Calculated
LFB/LCS	Lab Fortified Blank/Lab Control Sample
ORP	Oxidation-Reduction Potential
wet	Not dry weight corrected
% wt	Percent weight
Kg	Kilogram
g	Gram
mg	Milligram
µg	Microgram
ng	Nanogram
L	Liter
mL	Milliliter
µL	Microliter
m³	Cubic Meter
EPH	Extractable Petroleum Hydrocarbons
VPH	Volatile Petroleum Hydrocarbons
APH	Air Petroleum Hydrocarbons
FID	Flame Ionization Detector
PID	Photo Ionization Detector
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-01	Laboratory fortified blank/laboratory control sample recovery outside of control limits. Data validation is not affected since all results are "not detected" for all samples in this batch for this compound and bias is on the high side.
L-03	Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-05	Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the high side.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-06	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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Note: Blank Subtraction is not performed unless otherwise noted

- V-34 Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
- V-36 Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
- Z-01 Sample had a final vacuum of zero. Flow controllers have been verified to be okay, RPD was <20%
-

ANALYST

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RLF	Rebecca Faust
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MB	Mike Buttrick
MEK	Meghan E. Kelley
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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S062606-ICV1)		Lab File ID: J21A232023.D				Analyzed: 08/21/21 02:04			
Bromochloromethane (1)	152325	2.866	150879	2.863	101	60 - 140	0.0030	+/-0.50	
1,4-Difluorobenzene (1)	700372	3.471	694423	3.468	101	60 - 140	0.0030	+/-0.50	
Chlorobenzene-d5 (1)	652377	5.056	641566	5.057	102	60 - 140	-0.0010	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S069584-CCV1)		Lab File ID: J22A082004.D				Analyzed: 03/23/22 09:43			
Bromochloromethane (1)	172591	2.857	150879	2.863	114	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	639520	3.462	694423	3.468	92	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	567856	5.054	641566	5.057	89	60 - 140	-0.0030	+/-0.50	
LCS (B304046-BS1)		Lab File ID: J22A082005.D				Analyzed: 03/23/22 10:09			
Bromochloromethane (1)	170807	2.854	172591	2.857	99	60 - 140	-0.0030	+/-0.50	
1,4-Difluorobenzene (1)	639380	3.462	639520	3.462	100	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	562223	5.05	567856	5.054	99	60 - 140	-0.0040	+/-0.50	
Blank (B304046-BLK1)		Lab File ID: J22A082008.D				Analyzed: 03/23/22 11:37			
Bromochloromethane (1)	167218	2.844	172591	2.857	97	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	589211	3.456	639520	3.462	92	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	525002	5.048	567856	5.054	92	60 - 140	-0.0060	+/-0.50	
[REDACTED]		Lab File ID: J22A082015.D				Analyzed: 03/23/22 15:11			
Bromochloromethane (1)	165565	2.844	172591	2.857	96	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	582742	3.456	639520	3.462	91	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	509981	5.051	567856	5.054	90	60 - 140	-0.0030	+/-0.50	
[REDACTED]		Lab File ID: J22A082016.D				Analyzed: 03/23/22 15:45			
Bromochloromethane (1)	164917	2.844	172591	2.857	96	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	572585	3.456	639520	3.462	90	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	518446	5.047	567856	5.054	91	60 - 140	-0.0070	+/-0.50	
[REDACTED]		Lab File ID: J22A082017.D				Analyzed: 03/23/22 16:16			
Bromochloromethane (1)	161576	2.844	172591	2.857	94	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	571720	3.456	639520	3.462	89	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	512985	5.051	567856	5.054	90	60 - 140	-0.0030	+/-0.50	
[REDACTED]		Lab File ID: J22A082018.D				Analyzed: 03/23/22 16:40			
Bromochloromethane (1)	168297	2.844	172591	2.857	98	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	590113	3.456	639520	3.462	92	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	526120	5.051	567856	5.054	93	60 - 140	-0.0030	+/-0.50	

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INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SV-01 (22C1325-04)		Lab File ID: J22A082019.D				Analyzed: 03/23/22 17:05			
Bromochloromethane (1)	163286	2.844	172591	2.857	95	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	580041	3.456	639520	3.462	91	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	519668	5.051	567856	5.054	92	60 - 140	-0.0030	+/-0.50	
SV-04 (22C1325-07)		Lab File ID: J22A082020.D				Analyzed: 03/23/22 17:34			
Bromochloromethane (1)	174398	2.844	172591	2.857	101	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	599184	3.456	639520	3.462	94	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	546235	5.047	567856	5.054	96	60 - 140	-0.0070	+/-0.50	
SV-05 (22C1325-08)		Lab File ID: J22A082021.D				Analyzed: 03/23/22 17:58			
Bromochloromethane (1)	166882	2.844	172591	2.857	97	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	572744	3.456	639520	3.462	90	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	506622	5.05	567856	5.054	89	60 - 140	-0.0040	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S069625-CCV1)		Lab File ID: J22A083004.D				Analyzed: 03/24/22 12:22			
Bromochloromethane (1)	170249	2.857	150879	2.863	113	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	618725	3.462	694423	3.468	89	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	556027	5.054	641566	5.057	87	60 - 140	-0.0030	+/-0.50	
LCS (B304148-BS1)		Lab File ID: J22A083005.D				Analyzed: 03/24/22 12:53			
Bromochloromethane (1)	168430	2.857	170249	2.857	99	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	618308	3.465	618725	3.462	100	60 - 140	0.0030	+/-0.50	
Chlorobenzene-d5 (1)	540380	5.054	556027	5.054	97	60 - 140	0.0000	+/-0.50	
Blank (B304148-BLK1)		Lab File ID: J22A083008.D				Analyzed: 03/24/22 14:21			
Bromochloromethane (1)	160382	2.847	170249	2.857	94	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	549628	3.456	618725	3.462	89	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	496012	5.05	556027	5.054	89	60 - 140	-0.0040	+/-0.50	
[REDACTED]		Lab File ID: J22A083019.D				Analyzed: 03/24/22 19:26			
Bromochloromethane (1)	167981	2.851	170249	2.857	99	60 - 140	-0.0060	+/-0.50	
1,4-Difluorobenzene (1)	585728	3.459	618725	3.462	95	60 - 140	-0.0030	+/-0.50	
Chlorobenzene-d5 (1)	518920	5.051	556027	5.054	93	60 - 140	-0.0030	+/-0.50	
[REDACTED]		Lab File ID: J22A083036.D				Analyzed: 03/25/22 07:57			
Bromochloromethane (1)	173029	2.844	170249	2.857	102	60 - 140	-0.0130	+/-0.50	
1,4-Difluorobenzene (1)	584447	3.456	618725	3.462	94	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	523107	5.051	556027	5.054	94	60 - 140	-0.0030	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
SV-01 (22C1325-04RE1)		Lab File ID: J22A083037.D				Analyzed: 03/25/22 08:21			
Bromochloromethane (1)	172128	2.847	170249	2.857	101	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	578536	3.459	618725	3.462	94	60 - 140	-0.0030	+/-0.50	
Chlorobenzene-d5 (1)	508493	5.051	556027	5.054	91	60 - 140	-0.0030	+/-0.50	
SV-04 (22C1325-07RE1)		Lab File ID: J22A083038.D				Analyzed: 03/25/22 08:46			
Bromochloromethane (1)	160892	2.847	170249	2.857	95	60 - 140	-0.0100	+/-0.50	
1,4-Difluorobenzene (1)	540684	3.459	618725	3.462	87	60 - 140	-0.0030	+/-0.50	
Chlorobenzene-d5 (1)	484739	5.051	556027	5.054	87	60 - 140	-0.0030	+/-0.50	

CONTINUING CALIBRATION CHECK

EPA TO-15

S069584-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	4.46	1.013483	0.9046961		-10.7	30
Benzene	A	5.00	5.96	0.5773346	0.6885064		19.3	30
Benzyl chloride	A	5.00	5.28	0.5662092	0.5977572		5.6	30
Bromodichloromethane	A	5.00	5.33	0.4493554	0.4792344		6.6	30
Bromoform	A	5.00	4.96	0.6972692	0.6911301		-0.9	30
Bromomethane	A	5.00	4.47	0.795872	0.710971		-10.7	30
1,3-Butadiene	A	5.00	4.85	0.4907101	0.4757606		-3.0	30
2-Butanone (MEK)	A	5.00	4.01	1.40087	1.122663		-19.9	30
Carbon Disulfide	A	5.00	5.09	1.998984	2.033367		1.7	30
Carbon Tetrachloride	A	5.00	4.62	0.5188025	0.4788116		-7.7	30
Chlorobenzene	A	5.00	5.16	0.7193	0.7417796		3.1	30
Chloroethane	A	5.00	5.06	0.3795632	0.3840849		1.2	30
Chloroform	A	5.00	4.29	1.888134	1.618967		-14.3	30
Chloromethane	A	5.00	4.94	0.5417118	0.5348691		-1.3	30
Cyclohexane	A	5.00	4.98	0.265344	0.2640005		-0.5	30
Dibromochloromethane	A	5.00	5.16	0.6098379	0.6289059		3.1	30
1,2-Dibromoethane (EDB)	A	5.00	5.44	0.4553549	0.4952608		8.8	30
1,2-Dichlorobenzene	A	5.00	4.97	0.757862	0.7531543		-0.6	30
1,3-Dichlorobenzene	A	5.00	5.31	0.7367625	0.7820292		6.1	30
1,4-Dichlorobenzene	A	5.00	4.82	0.7493582	0.7227156		-3.6	30
Dichlorodifluoromethane (Freon 12)	A	5.00	4.19	2.185662	1.831956		-16.2	30
1,1-Dichloroethane	A	5.00	4.36	1.41636	1.235225		-12.8	30
1,2-Dichloroethane	A	5.00	4.06	1.131436	0.9177025		-18.9	30
1,1-Dichloroethylene	A	5.00	5.07	1.038306	1.052134		1.3	30
cis-1,2-Dichloroethylene	A	5.00	4.37	1.058854	0.9250633		-12.6	30
trans-1,2-Dichloroethylene	A	5.00	4.21	1.144971	0.9637026		-15.8	30
1,2-Dichloropropane	A	5.00	5.54	0.2035658	0.2255417		10.8	30
cis-1,3-Dichloropropene	A	5.00	5.68	0.3153762	0.3585739		13.7	30
trans-1,3-Dichloropropene	A	5.00	5.51	0.2855395	0.3145359		10.2	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 1)	A	5.00	4.68	2.0897	1.957071		-6.3	30
1,4-Dioxane	A	5.00	5.28	0.1348394	0.1423468		5.6	30
Ethanol	A	5.00	7.09	0.1363511	0.1932244		41.7	30 *
Ethyl Acetate	A	5.00	3.01	0.2996362	0.1802272		-39.9	30 *
Ethylbenzene	A	5.00	5.28	1.068394	1.1281		5.6	30
4-Ethyltoluene	A	5.00	5.13	1.191921	1.222986		2.6	30
Heptane	A	5.00	5.47	0.1598388	0.1748311		9.4	30
Hexachlorobutadiene	A	5.00	3.66	1.05506	0.7730298		-26.7	30
Hexane	L	5.00	4.38	0.7820405	0.6297246		-12.5	30

CONTINUING CALIBRATION CHECK

EPA TO-15

S069584-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	6.50	0.3105363	0.4034093		29.9	30
Isopropanol	A	5.00	5.18	1.087458	1.12766		3.7	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	3.82	2.400388	1.832309		-23.7	30
Methylene Chloride	A	5.00	5.29	0.6720844	0.7107671		5.8	30
4-Methyl-2-pentanone (MIBK)	A	5.00	6.39	0.141787	0.1812484		27.8	30
Naphthalene	A	5.00	4.40	1.049522	0.9245358		-11.9	30
Propene	A	5.00	4.32	0.4575591	0.3954691		-13.6	30
Styrene	A	5.00	5.34	0.6387272	0.6816094		6.7	30
1,1,2,2-Tetrachloroethane	A	5.00	6.08	0.5691929	0.692136		21.6	30
Tetrachloroethylene	A	5.00	4.48	0.5934671	0.5316136		-10.4	30
Tetrahydrofuran	A	5.00	4.16	0.811293	0.6742878		-16.9	30
Toluene	A	5.00	5.17	0.8381161	0.8666451		3.4	30
1,2,4-Trichlorobenzene	A	5.00	3.28	0.5285083	0.3471218		-34.3	30 *
1,1,1-Trichloroethane	A	5.00	4.84	0.4533588	0.4392895		-3.1	30
1,1,2-Trichloroethane	A	5.00	5.37	0.2953724	0.3172861		7.4	30
Trichloroethylene	A	5.00	5.15	0.2950588	0.3039605		3.0	30
Trichlorofluoromethane (Freon 11)	A	5.00	4.43	2.216429	1.965711		-11.3	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	4.90	1.637043	1.603634		-2.0	30
1,2,4-Trimethylbenzene	A	5.00	4.91	1.051818	1.0336		-1.7	30
1,3,5-Trimethylbenzene	A	5.00	5.12	1.056033	1.081415		2.4	30
Vinyl Acetate	A	5.00	6.34	1.072956	1.360154		26.8	30
Vinyl Chloride	A	5.00	5.09	0.6636142	0.6754929		1.8	30
m&p-Xylene	A	10.0	10.9	0.8662275	0.9425108		8.8	30
o-Xylene	A	5.00	5.27	0.8477905	0.8940069		5.5	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CONTINUING CALIBRATION CHECK

EPA TO-15

S069625-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	4.63	1.013483	0.9383526		-7.4	30
Benzene	A	5.00	6.02	0.5773346	0.6949129		20.4	30
Benzyl chloride	A	5.00	4.84	0.5662092	0.548428		-3.1	30
Bromodichloromethane	A	5.00	5.60	0.4493554	0.502856		11.9	30
Bromoform	A	5.00	5.08	0.6972692	0.7089411		1.7	30
Bromomethane	A	5.00	4.65	0.795872	0.7402428		-7.0	30
1,3-Butadiene	A	5.00	4.90	0.4907101	0.4808204		-2.0	30
2-Butanone (MEK)	A	5.00	4.49	1.40087	1.258157		-10.2	30
Carbon Disulfide	A	5.00	5.17	1.998984	2.066893		3.4	30
Carbon Tetrachloride	A	5.00	4.87	0.5188025	0.5053049		-2.6	30
Chlorobenzene	A	5.00	5.25	0.7193	0.7557676		5.1	30
Chloroethane	A	5.00	5.14	0.3795632	0.3902895		2.8	30
Chloroform	A	5.00	4.42	1.888134	1.66822		-11.6	30
Chloromethane	A	5.00	5.04	0.5417118	0.5464937		0.9	30
Cyclohexane	A	5.00	5.01	0.265344	0.2660697		0.3	30
Dibromochloromethane	A	5.00	5.26	0.6098379	0.6419285		5.3	30
1,2-Dibromoethane (EDB)	A	5.00	5.53	0.4553549	0.5034461		10.6	30
1,2-Dichlorobenzene	A	5.00	4.92	0.757862	0.7457652		-1.6	30
1,3-Dichlorobenzene	A	5.00	5.36	0.7367625	0.7896221		7.2	30
1,4-Dichlorobenzene	A	5.00	4.75	0.7493582	0.711577		-5.0	30
Dichlorodifluoromethane (Freon 12)	A	5.00	4.33	2.185662	1.890868		-13.5	30
1,1-Dichloroethane	A	5.00	4.46	1.41636	1.263129		-10.8	30
1,2-Dichloroethane	A	5.00	4.12	1.131436	0.932883		-17.5	30
1,1-Dichloroethylene	A	5.00	5.26	1.038306	1.092771		5.2	30
cis-1,2-Dichloroethylene	A	5.00	4.37	1.058854	0.926154		-12.5	30
trans-1,2-Dichloroethylene	A	5.00	4.36	1.144971	0.9974567		-12.9	30
1,2-Dichloropropane	A	5.00	5.82	0.2035658	0.2367837		16.3	30
cis-1,3-Dichloropropene	A	5.00	5.80	0.3153762	0.3659577		16.0	30
trans-1,3-Dichloropropene	A	5.00	5.61	0.2855395	0.3201552		12.1	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 1)	A	5.00	4.78	2.0897	1.997582		-4.4	30
1,4-Dioxane	A	5.00	5.61	0.1348394	0.1512478		12.2	30
Ethanol	A	5.00	7.48	0.1363511	0.2039272		49.6	30 *
Ethyl Acetate	A	5.00	3.01	0.2996362	0.1805074		-39.8	30 *
Ethylbenzene	A	5.00	5.27	1.068394	1.126411		5.4	30
4-Ethyltoluene	A	5.00	5.14	1.191921	1.225345		2.8	30
Heptane	A	5.00	5.82	0.1598388	0.1860937		16.4	30
Hexachlorobutadiene	A	5.00	3.75	1.05506	0.791527		-25.0	30
Hexane	L	5.00	4.53	0.7820405	0.6507833		-9.5	30

CONTINUING CALIBRATION CHECK

EPA TO-15

S069625-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	5.95	0.3105363	0.3697892		19.1	30
Isopropanol	A	5.00	5.23	1.087458	1.138004		4.6	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	3.76	2.400388	1.807574		-24.7	30
Methylene Chloride	A	5.00	5.44	0.6720844	0.7309388		8.8	30
4-Methyl-2-pentanone (MIBK)	A	5.00	6.60	0.141787	0.1870453		31.9	30 *
Naphthalene	A	5.00	4.31	1.049522	0.905156		-13.8	30
Propene	A	5.00	4.31	0.4575591	0.3946596		-13.7	30
Styrene	A	5.00	5.33	0.6387272	0.681095		6.6	30
1,1,2,2-Tetrachloroethane	A	5.00	6.33	0.5691929	0.7204888		26.6	30
Tetrachloroethylene	A	5.00	4.54	0.5934671	0.5389868		-9.2	30
Tetrahydrofuran	A	5.00	4.07	0.811293	0.6605196		-18.6	30
Toluene	A	5.00	5.29	0.8381161	0.8860491		5.7	30
1,2,4-Trichlorobenzene	A	5.00	3.28	0.5285083	0.3464609		-34.4	30 *
1,1,1-Trichloroethane	A	5.00	4.99	0.4533588	0.452391		-0.2	30
1,1,2-Trichloroethane	A	5.00	5.42	0.2953724	0.3202837		8.4	30
Trichloroethylene	A	5.00	5.15	0.2950588	0.3041222		3.1	30
Trichlorofluoromethane (Freon 11)	A	5.00	4.58	2.216429	2.029996		-8.4	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	5.02	1.637043	1.64324		0.4	30
1,2,4-Trimethylbenzene	A	5.00	4.90	1.051818	1.030572		-2.0	30
1,3,5-Trimethylbenzene	A	5.00	5.15	1.056033	1.087636		3.0	30
Vinyl Acetate	A	5.00	6.34	1.072956	1.360558		26.8	30
Vinyl Chloride	A	5.00	5.35	0.6636142	0.7096617		6.9	30
m&p-Xylene	A	10.0	11.1	0.8662275	0.9633345		11.2	30
o-Xylene	A	5.00	5.41	0.8477905	0.9178115		8.3	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
Acetone	AIHA,NY,ME,NH
Benzene	AIHA,FL,NJ,NY,ME,NH,VA
Benzyl chloride	AIHA,FL,NJ,NY,ME,NH,VA
Bromodichloromethane	AIHA,NJ,NY,ME,NH,VA
Bromoform	AIHA,NJ,NY,ME,NH,VA
Bromomethane	AIHA,FL,NJ,NY,ME,NH
1,3-Butadiene	AIHA,NJ,NY,ME,NH,VA
2-Butanone (MEK)	AIHA,FL,NJ,NY,ME,NH,VA
Carbon Disulfide	AIHA,NJ,NY,ME,NH,VA
Carbon Tetrachloride	AIHA,FL,NJ,NY,ME,NH,VA
Chlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Chloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Chloroform	AIHA,FL,NJ,NY,ME,NH,VA
Chloromethane	AIHA,FL,NJ,NY,ME,NH,VA
Cyclohexane	AIHA,NJ,NY,ME,NH,VA
Dibromochloromethane	AIHA,NY,ME,NH
1,2-Dibromoethane (EDB)	AIHA,NJ,NY,ME,NH
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
1,3-Dichlorobenzene	AIHA,NJ,NY,ME,NH
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	AIHA,NY,ME,NH
1,1-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,2-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,2-Dichloropropane	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,ME,NH,VA
trans-1,3-Dichloropropene	AIHA,NY,ME,NH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,ME,NH,VA
4-Ethyltoluene	AIHA,NJ
Heptane	AIHA,NJ,NY,ME,NH,VA
Hexachlorobutadiene	AIHA,NJ,NY,ME,NH,VA
Hexane	AIHA,FL,NJ,NY,ME,NH,VA
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY,ME,NH
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,ME,NH,VA
Methylene Chloride	AIHA,FL,NJ,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY,ME,NH
Naphthalene	NY,ME,NH
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,ME,NH,VA

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
EPA TO-15 in Air	
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Tetrahydrofuran	AIHA
Toluene	AIHA,FL,NJ,NY,ME,NH,VA
1,2,4-Trichlorobenzene	AIHA,NJ,NY,ME,NH,VA
1,1,1-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	AIHA,NY,ME,NH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY,ME,NH,VA
1,2,4-Trimethylbenzene	AIHA,NJ,NY,ME,NH
1,3,5-Trimethylbenzene	AIHA,NJ,NY,ME,NH
Vinyl Acetate	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA
m&p-Xylene	AIHA,FL,NJ,NY,ME,NH,VA
o-Xylene	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO17025:2017	100033	03/1/2024
MA	Massachusetts DEP	M-MA100	06/30/2022
CT	Connecticut Department of Public Health	PH-0165	12/31/2022
NY	New York State Department of Health	10899 NELAP	04/1/2023
NH-S	New Hampshire Environmental Lab	2516 NELAP	02/5/2023
RI	Rhode Island Department of Health	LAO00373	12/30/2022
NC	North Carolina Div. of Water Quality	652	12/31/2022
NJ	New Jersey DEP	MA007 NELAP	06/30/2022
FL	Florida Department of Health	E871027 NELAP	06/30/2022
VT	Vermont Department of Health Lead Laboratory	LL720741	07/30/2022
ME	State of Maine	MA00100	06/9/2023
VA	Commonwealth of Virginia	460217	12/14/2022
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2022
VT-DW	Vermont Department of Health Drinking Water	VT-255716	06/12/2022
NC-DW	North Carolina Department of Health	25703	07/31/2022
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2022
MI	Dept. of Env, Great Lakes, and Energy	9100	09/6/2022

NYDEC
Company Name/Address:

Accounts Payable
831 Route 67
Ballston, NY 12020

		Analysis		Chain of Custody	Page <u>1</u> of <u>1</u>

269 West Jefferson St.
Syracuse, NY 13202

Report To:

Noah Robinson

Email To:
nrobinson@east.com

Project **Roxy Cleaners**
Description:

City/State
Collected: **WNY Skill , Ny**

Please Circle:
PT MT CT ET

Phone:
315-849-4194

Client Project #
44ID24

Lab Project #
NYDEC-EA

SDG #

Collected by (print):
Noah Robinson

Site/Facility ID #

Table #

Collected by (signature):
Noah Robinson

Rush? (Lab MUST Be Notified)

Acctnum: **NYDEC**

Same Day _____

Three Day _____

Next Day _____

Five Day _____

Two Day _____

Standards

Template: **T204878**

Date Results Needed

Prolong: **P909981**

PM: **134 -Mark W. Peasey**

PB: **01/03/01**

Shipped Via: **FedEX Ground**

Rem/Contaminant

Sample # (lab only)

Sample ID

Can #

Flow Cont. #

Date

Time

Initial

Final

Collection

Canister Pressure/Vacuum

TA-195

10240

00952

3-16-22

1009

-29

-12

X

SV-195

010208

010494

3-16-22

1012

-29

-6

X

OA-195

00740902

007100

3-16-22

1019

-30

-4

X

SV-01

0091210

0091676

3-16-22

1024

-28

-3

X

SV-02

011261

009134

3-16-22

1031

-30

-29

X

SV-03

008090

009703

3-16-22

1040

-28

-27

X

SV-04

009046

010214

3-16-22

1115

-29.5

-23

X

SV-05

010234

010181

3-16-22

1051

-24

0

X

Remarks:

Relinquished by: (Signature) Noah Robinson	Date: 3-16-22	Time: 1545	Received by: (Signature) PF	Tracking #	Hold #
Relinquished by: (Signature) Noah Robinson	Date: 3/16	Time: 1200	Received by: (Signature) PF	Date: 3/17	Condition: (lab use only) 1545
Relinquished by: (Signature) Noah Robinson	Date: 3/18/2023	Time: 9:29	Received for lab by: (Signature) PF	Date: 3/18/2023	Time: 9:29
Relinquished by: (Signature) Noah Robinson	Date: 3/18/2023	Time: 9:29	COC Seal intact: Y	NICE: NA	



FedEx® Tracking

⋮

776329619771



ADD NICKNAME

Delivered
Friday, March 18, 2022 at 9:26 am



DELIVERED

Signed for by: C.RIOS

[GET STATUS UPDATES](#)

[OBTAIN PROOF OF DELIVERY](#)

FROM **TO**
East Syracuse, NY US EAST LONGMEADOW, MA US

[MANAGE DELIVERY](#) ▾

Travel History

TIME ZONE

Local Scan Time



**Friday, March 18,
2022**

9:26 AM	EAST LONGMEADOW, MA	Delivered
7:44 AM	WINDSOR LOCKS, CT	On FedEx vehicle for delivery
7:35 AM	WINDSOR LOCKS, CT	At local FedEx facility
2:28 AM	NEWARK, NJ	Departed FedEx hub
12:03 AM	NEWARK, NJ	Arrived at FedEx hub

Thursday, March 17, 2022

8:33 PM	NORTH SYRACUSE, NY	Left FedEx origin facility
4:43 PM	NORTH SYRACUSE, NY	Shipment arriving On-Time
4:31 PM	NORTH SYRACUSE, NY	Picked up
2:38 PM		Shipment information sent to FedEx

I Have Not Confirmed Sample Container
Numbers With Lab Staff Before
Relinquishing Over
Samples _____



con-test®
ANALYTICAL LABORATORY

Doc# 27B Rev 6 2017

Air Media Sample Receipt Checklist - (Rejection Criteria Listing - Using Acceptance Policy) Any False Statement will be brought to the attention of the Client - State True or False

Client NY DEC

Received By	<u>RLF</u>	Date	<u>31.8.2022</u>	Time	<u>930</u>
How were the samples received?	In Cooler In Box	On Ice Ambient		No Ice	
Were samples within Temperature Compliance? 2-6°C	<u>NA</u>	By Gun # By Blank #		Actual Temp - Actual Temp -	
Was Custody Seal Intact?	<u>NA</u>			Were Samples Tampered with?	<u>NA</u>
Was COC Relinquished ?	<u>T</u>			Does Chain Agree With Samples?	<u>T</u>
Are there any loose caps/valves on any samples?	<u>F</u>				
Is COC in ink/ Legible?	<u>T</u>				
Did COC Include all Pertinent Information?	Client <u>T</u> Project <u>T</u>	Analysis <u>T</u> ID's <u>T</u>		Sampler Name <u>T</u> Collection Dates/Times <u>T</u>	
Are Sample Labels filled out and legible?	<u>T</u>				
Are there Rushes?	<u>F</u>	Who was notified?			
Samples are received within holding time?	<u>T</u>				
Proper Media Used?	<u>T</u>			Individually Certified Cans? <u>F</u>	
Are there Trip Blanks?	<u>F</u>			Is there enough Volume? <u>T</u>	

Containers:	#	Size	Regulator	Duration	Accessories:	
Summa Cans	<u>8</u>	<u>1.4L</u>	<u>8</u>	<u>24hr</u>	Nut/Ferrule	<u>IC Train</u>
Tedlar Bags					Tubing	
TO-17 Tubes					T-Connector	<u>Shipping Charges</u>
Radiello					Syringe	
Pufs/TO-11s					Tedlar	

Can #'s				Reg #'s			
10240	0090410			00952	010214		
016208	0102341			010494	010181		
12300				017100			
009210				009676			
011261				009934			
008090				009703			
Unused Media				Pufs/TO-17's			

Comments:

Canister Certification Results

Sample #	Canister ID	Date Cleaned	GC/MS
SV-02	11261	11/01/2021	AIRMS9
SV-05	10234	11/01/2021	AIRMS9

QC Canister #8176 GC/MS Analysis File 1103_05 Date Analyzed 11/03/2021

Less than 0.5 ppbv total hydrocarbon _____
ND = Not detected

Analyst Initials CJ

Compounds	CAS #	Mwt.	PPBV	Result	ug/m ³
Propene	115-07-1	42.08	1.25	ND	0.69
1,1-Difluoroethane	75-37-6	66.05	1.00	ND	0.54
Dichlorodifluoromethane	75-71-8	120.92	0.20	ND	0.99
Chlorodifluoromethane	75-45-6	86.77	0.20	ND	0.71
1,2-Dichlortetrafluoroethane	76-14-2	170.93	0.20	ND	1.40
Chloromethane	74-87-3	50.5	0.20	ND	0.41
Vinyl chloride	75-01-4	62.5	0.20	ND	0.51
1,3-butadiene	106-99-0	54.09	2.00	ND	4.42
Bromomethane	74-83-9	94.9	0.20	ND	0.78
Chloroethane	75-00-3	64	0.20	ND	0.52
Trichlorofluoromethane	75-69-4	137.38	0.20	ND	1.12
Ethanol	64-17-5	46.07	1.25	ND	1.19
1,1,2-Trichlorotrifluoroethane	76-13-1	187.38	0.20	ND	1.53
1,1-Dichloroethene	75-35-4	97	0.20	ND	0.79
Acetone	67-64-1	58.08	1.25	ND	2.97
1,1-dichloroethane	75-34-3	98.96	0.20	ND	0.81
2-propanol	67-63-0	60.1	1.25	ND	3.07
Carbon Disulfide	75-15-0	76	0.20	ND	0.62
Allyl Chloride	107-05-1	76.52	0.20	ND	0.63
Methylene chloride	75-09-2	84.9	0.20	ND	0.69
MTBE	1634-04-4	88.15	0.20	ND	0.72
Trans-1,2-dichloroethene	156-60-5	96.94	0.20	ND	0.79
Hexane	110-54-3	86.2	0.20	ND	0.70
Vinyl Acetate	108-05-4	86.09	0.20	ND	0.70
Ethyl Acetate	141-78-6	88.11	0.20	ND	0.72
2-Butanone	78-93-3	72	1.25	ND	3.68
Cis-1,2-Dichloroethene	156-59-2	96	0.20	ND	0.79
Tetrahydrofuran	109-99-9	72.11	0.20	ND	0.59
Chloroform	67-66-3	119	0.20	ND	0.97
Cyclohexane	110-82-7	84.2	0.20	ND	0.69
1,1,1-Trichloroethane	71-55-6	133.4	0.20	ND	1.09
Carbon Tetrachloride	56.23-5	153.8	0.20	ND	1.26
2,2,4-Trimethylpentane	540-84-1	114.23	0.20	ND	0.93
Benzene	71-43-2	78	0.20	ND	0.64
1,2-Dichloroethane	107-06-2	99	0.20	ND	0.81
Heptane	142-82-5	100.2	0.20	ND	0.82
Trichloroethylene	79-01-6	131.4	0.20	ND	1.07
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.20	ND	0.95
Methyl Cyclohexane	108-87-2	98.19	0.20	ND	0.80

Canister Certification Results

Compounds	CAS#	Mwt.	PPBV	Result	ug/m³
1,2-Dichloropropane	78-87-5	113	0.20	ND	0.92
Methyl Methacrylate	80-62-6	100.12	0.20	ND	0.82
1,4-Dioxane	123-91-1	88.11	0.20	ND	0.72
Bromodichloromethane	75-27-4	163	0.20	ND	1.33
Cis-1,3-Dichloropropene	10061-01-5	110.98	0.20	ND	0.91
4-Methyl-2-Pentanone	108-10-1	100.16	1.25	ND	5.12
n-Octane	111-65-9	114.22	0.20	ND	0.93
Toluene	108-88-3	92	0.20	ND	0.75
Trans-1,3-Dichloropropene	10061-02-6	110.98	0.20	ND	0.91
1,1,2-Trichloroethane	79-00-5	133.4	0.20	ND	1.09
Tetrachloroethylene	127-18-4	165.8	0.20	ND	1.36
Methyl Butyl Ketone	591-78-6	100.16	1.25	ND	5.12
Dibromochloromethane	124-48-1	208.28	0.20	ND	1.70
1,2-Dibromoethane	106-93-4	187.9	0.20	ND	1.54
Chlorobenzene	108-90-7	112.6	0.20	ND	0.92
Nonane	111-84-2	128.26	0.20	ND	1.05
Ethylbenzene	100-41-4	106.2	0.20	ND	0.87
M&P-Xylene	1330-20-7	106.2	0.40	ND	1.74
O-Xylene	95-47-6	106.2	0.20	ND	0.87
Styrene	100-42-5	104	0.20	ND	0.85
Bromoform	75-25-2	252.8	0.60	ND	6.20
Isopropylbenzene	98-82-8	120.19	0.20	ND	0.98
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.20	ND	1.37
4-Ethyltoluene	622-96-8	120.19	0.20	ND	0.98
2-Chlorotoluene	95-49-8	126.59	0.20	ND	1.03
1,3,5-Trimethyl benzene	108-67-8	120	0.20	ND	0.98
Tert-Butylbenzene	98-06-6	134.22	0.20	ND	1.10
1,2,4-Trimethyl benzene	95-63-6	120	0.20	ND	0.98
Sec-Butylbenzene	135-98-8	134.22	0.20	ND	1.10
1,3-Dichlorobenzene	541-73-1	146	0.20	ND	1.19
P-Isopropyltoluene	99-87-6	134.22	0.20	ND	1.1
1,4-Dichlorobenzene	106-46-7	147	0.20	ND	1.20
1,2,3-Trimethylbenzene	526-73-8	120.2	0.20	ND	0.98
Benzyl Chloride	100-44-7	126.58	0.20	ND	1.04
n-butylbenzene	104-51-8	134.22	0.20	ND	1.1
1,2-Dichlorobenzene	95-50-1	146	0.20	ND	1.19
1,2,4-Trichlorobenzene	120-82-1	181.5	0.63	ND	4.64
Hexachloro-1,3-Butadiene	87-68-3	260.17	0.63	ND	6.70
Naphthalene	91-20-3	128.17	0.63	ND	3.30
TPH	n/a	101	200	ND	245.4

Canister Certification Results

Sample #	Canister ID	Date Cleaned	GC/MS
SV-[REDACTED]	10494	10/20/2021	AIRMS9
SV-01	9210	10/20/2021	AIRMS9
SV-04	9046	10/20/2021	AIRMS9

QC Canister #8155 GC/MS Analysis File 1022_06 Date Analyzed_10/22/2021

 Less than 0.5 ppbv total hydrocarbon _____
 ND = Not detected

Analyst Initials CJ

Compounds	CAS #	Mwt.	PPBV	Result	ug/m³
Propene	115-07-1	42.08	1.25	ND	0.69
1,1-Difluoroethane	75-37-6	66.05	1.00	ND	0.54
Dichlorodifluoromethane	75-71-8	120.92	0.20	ND	0.99
Chlorodifluoromethane	75-45-6	86.77	0.20	ND	0.71
1,2-Dichlorotetrafluoroethane	76-14-2	170.93	0.20	ND	1.40
Chloromethane	74-87-3	50.5	0.20	ND	0.41
Vinyl chloride	75-01-4	62.5	0.20	ND	0.51
1,3-butadiene	106-99-0	54.09	2.00	ND	4.42
Bromomethane	74-83-9	94.9	0.20	ND	0.78
Chloroethane	75-00-3	64	0.20	ND	0.52
Trichlorofluoromethane	75-69-4	137.38	0.20	ND	1.12
Ethanol	64-17-5	46.07	1.25	ND	1.19
1,1,2-Trichlorotrifluoroethane	76-13-1	187.38	0.20	ND	1.53
1,1-Dichloroethene	75-35-4	97	0.20	ND	0.79
Acetone	67-64-1	58.08	1.25	ND	2.97
1,1-dichloroethane	75-34-3	98.96	0.20	ND	0.81
2-propanol	67-63-0	60.1	1.25	ND	3.07
Carbon Disulfide	75-15-0	76	0.20	ND	0.62
Allyl Chloride	107-05-1	76.52	0.20	ND	0.63
Methylene chloride	75-09-2	84.9	0.20	ND	0.69
MTBE	1634-04-4	88.15	0.20	ND	0.72
Trans-1,2-dichloroethene	156-60-5	96.94	0.20	ND	0.79
Hexane	110-54-3	86.2	0.20	ND	0.70
Vinyl Acetate	108-05-4	86.09	0.20	ND	0.70
Ethyl Acetate	141-78-6	88.11	0.20	ND	0.72
2-Butanone	78-93-3	72	1.25	ND	3.68
Cis-1,2-Dichloroethene	156-59-2	96	0.20	ND	0.79
Tetrahydrofuran	109-99-9	72.11	0.20	ND	0.59
Chloroform	67-66-3	119	0.20	ND	0.97
Cyclohexane	110-82-7	84.2	0.20	ND	0.69
1,1,1-Trichloroethane	71-55-6	133.4	0.20	ND	1.09
Carbon Tetrachloride	56.23-5	153.8	0.20	ND	1.26
2,2,4-Trimethylpentane	540-84-1	114.23	0.20	ND	0.93
Benzene	71-43-2	78	0.20	ND	0.64
1,2-Dichloroethane	107-06-2	99	0.20	ND	0.81
Heptane	142-82-5	100.2	0.20	ND	0.82
Trichloroethylene	79-01-6	131.4	0.20	ND	1.07
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.20	ND	0.95
Methyl Cyclohexane	108-87-2	98.19	0.20	ND	0.80

Canister Certification Results

Compounds	CAS#	Mwt.	PPBV	Result	ug/m ³
1,2-Dichloropropane	78-87-5	113	0.20	ND	0.92
Methyl Methacrylate	80-62-6	100.12	0.20	ND	0.82
1,4-Dioxane	123-91-1	88.11	0.20	ND	0.72
Bromodichloromethane	75-27-4	163	0.20	ND	1.33
Cis-1,3-Dichloropropene	10061-01-5	110.98	0.20	ND	0.91
4-Methyl-2-Pentanone	108-10-1	100.16	1.25	ND	5.12
n-Octane	111-65-9	114.22	0.20	ND	0.93
Toluene	108-88-3	92	0.20	ND	0.75
Trans-1,3-Dichloropropene	10061-02-6	110.98	0.20	ND	0.91
1,1,2-Trichloroethane	79-00-5	133.4	0.20	ND	1.09
Tetrachloroethylene	127-18-4	165.8	0.20	ND	1.36
Methyl Butyl Ketone	591-78-6	100.16	1.25	ND	5.12
Dibromochloromethane	124-48-1	208.28	0.20	ND	1.70
1,2-Dibromoethane	106-93-4	187.9	0.20	ND	1.54
Chlorobenzene	108-90-7	112.6	0.20	ND	0.92
Nonane	111-84-2	128.26	0.20	ND	1.05
Ethylbenzene	100-41-4	106.2	0.20	ND	0.87
M&P-Xylene	1330-20-7	106.2	0.40	ND	1.74
O-Xylene	95-47-6	106.2	0.20	ND	0.87
Styrene	100-42-5	104	0.20	ND	0.85
Bromoform	75-25-2	252.8	0.60	ND	6.20
Isopropylbenzene	98-82-8	120.19	0.20	ND	0.98
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.20	ND	1.37
4-Ethyltoluene	622-96-8	120.19	0.20	ND	0.98
2-Chlorotoluene	95-49-8	126.59	0.20	ND	1.03
1,3,5-Trimethyl benzene	108-67-8	120	0.20	ND	0.98
Tert-Butylbenzene	98-06-6	134.22	0.20	ND	1.10
1,2,4-Trimethyl benzene	95-63-6	120	0.20	ND	0.98
Sec-Butylbenzene	135-98-8	134.22	0.20	ND	1.10
1,3-Dichlorobenzene	541-73-1	146	0.20	ND	1.19
P-Isopropyltoluene	99-87-6	134.22	0.20	ND	1.1
1,4-Dichlorobenzene	106-46-7	147	0.20	ND	1.20
1,2,3-Trimethylbenzene	526-73-8	120.2	0.20	ND	0.98
Benzyl Chloride	100-44-7	126.58	0.20	ND	1.04
n-butylbenzene	104-51-8	134.22	0.20	ND	1.1
1,2-Dichlorobenzene	95-50-1	146	0.20	ND	1.19
1,2,4-Trichlorobenzene	120-82-1	181.5	0.63	ND	4.64
Hexachloro-1,3-Butadiene	87-68-3	260.17	0.63	ND	6.70
Naphthalene	91-20-3	128.17	0.63	ND	3.30
TPH	n/a	101	200	ND	245.4

Canister Certification Results

Sample #	Canister ID	Date Cleaned	GC/MS
IA-[REDACTED]	10240	10/20/2021	AIRMS9
OA-[REDACTED]	12306	10/20/2021	AIRMS9
SV-03	8090	10/20/2021	AIRMS9

QC Canister #8154 GC/MS Analysis File 1022_05 Date Analyzed 10/22/2021

Less than 0.5 ppbv total hydrocarbon _____
 ND = Not detected

Analyst Initials CJ

Compounds	CAS #	Mwt.	PPBV	Result	ug/m ³
Propene	115-07-1	42.08	1.25	ND	0.69
1,1-Difluoroethane	75-37-6	66.05	1.00	ND	0.54
Dichlorodifluoromethane	75-71-8	120.92	0.20	ND	0.99
Chlorodifluoromethane	75-45-6	86.77	0.20	ND	0.71
1,2-Dichlorotetrafluoroethane	76-14-2	170.93	0.20	ND	1.40
Chloromethane	74-87-3	50.5	0.20	ND	0.41
Vinyl chloride	75-01-4	62.5	0.20	ND	0.51
1,3-butadiene	106-99-0	54.09	2.00	ND	4.42
Bromomethane	74-83-9	94.9	0.20	ND	0.78
Chloroethane	75-00-3	64	0.20	ND	0.52
Trichlorofluoromethane	75-69-4	137.38	0.20	ND	1.12
Ethanol	64-17-5	46.07	1.25	ND	1.19
1,1,2-Trichlorotrifluoroethane	76-13-1	187.38	0.20	ND	1.53
1,1-Dichloroethene	75-35-4	97	0.20	ND	0.79
Acetone	67-64-1	58.08	1.25	ND	2.97
1,1-dichloroethane	75-34-3	98.96	0.20	ND	0.81
2-propanol	67-63-0	60.1	1.25	ND	3.07
Carbon Disulfide	75-15-0	76	0.20	ND	0.62
Allyl Chloride	107-05-1	76.52	0.20	ND	0.63
Methylene chloride	75-09-2	84.9	0.20	ND	0.69
MTBE	1634-04-4	88.15	0.20	ND	0.72
Trans-1,2-dichloroethene	156-60-5	96.94	0.20	ND	0.79
Hexane	110-54-3	86.2	0.20	ND	0.70
Vinyl Acetate	108-05-4	86.09	0.20	ND	0.70
Ethyl Acetate	141-78-6	88.11	0.20	ND	0.72
2-Butanone	78-93-3	72	1.25	ND	3.68
Cis-1,2-Dichloroethene	156-59-2	96	0.20	ND	0.79
Tetrahydrofuran	109-99-9	72.11	0.20	ND	0.59
Chloroform	67-66-3	119	0.20	ND	0.97
Cyclohexane	110-82-7	84.2	0.20	ND	0.69
1,1,1-Trichloroethane	71-55-6	133.4	0.20	ND	1.09
Carbon Tetrachloride	56.23-5	153.8	0.20	ND	1.26
2,2,4-Trimethylpentane	540-84-1	114.23	0.20	ND	0.93
Benzene	71-43-2	78	0.20	ND	0.64
1,2-Dichloroethane	107-06-2	99	0.20	ND	0.81
Heptane	142-82-5	100.2	0.20	ND	0.82
Trichloroethylene	79-01-6	131.4	0.20	ND	1.07
Tert-Amyl Ethyl Ether	919-94-8	116.20	0.20	ND	0.95
Methyl Cyclohexane	108-87-2	98.19	0.20	ND	0.80

Canister Certification Results

Compounds	CAS#	Mwt.	PPBV	Result	ug/m ³
1,2-Dichloropropane	78-87-5	113	0.20	ND	0.92
Methyl Methacrylate	80-62-6	100.12	0.20	ND	0.82
1,4-Dioxane	123-91-1	88.11	0.20	ND	0.72
Bromodichloromethane	75-27-4	163	0.20	ND	1.33
Cis-1,3-Dichloropropene	10061-01-5	110.98	0.20	ND	0.91
4-Methyl-2-Pentanone	108-10-1	100.16	1.25	ND	5.12
n-Octane	111-65-9	114.22	0.20	ND	0.93
Toluene	108-88-3	92	0.20	ND	0.75
Trans-1,3-Dichloropropene	10061-02-6	110.98	0.20	ND	0.91
1,1,2-Trichloroethane	79-00-5	133.4	0.20	ND	1.09
Tetrachloroethylene	127-18-4	165.8	0.20	ND	1.36
Methyl Butyl Ketone	591-78-6	100.16	1.25	ND	5.12
Dibromochloromethane	124-48-1	208.28	0.20	ND	1.70
1,2-Dibromoethane	106-93-4	187.9	0.20	ND	1.54
Chlorobenzene	108-90-7	112.6	0.20	ND	0.92
Nonane	111-84-2	128.26	0.20	ND	1.05
Ethylbenzene	100-41-4	106.2	0.20	ND	0.87
M&P-Xylene	1330-20-7	106.2	0.40	ND	1.74
O-Xylene	95-47-6	106.2	0.20	ND	0.87
Styrene	100-42-5	104	0.20	ND	0.85
Bromoform	75-25-2	252.8	0.60	ND	6.20
Isopropylbenzene	98-82-8	120.19	0.20	ND	0.98
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.20	ND	1.37
4-Ethyltoluene	622-96-8	120.19	0.20	ND	0.98
2-Chlorotoluene	95-49-8	126.59	0.20	ND	1.03
1,3,5-Trimethyl benzene	108-67-8	120	0.20	ND	0.98
Tert-Butylbenzene	98-06-6	134.22	0.20	ND	1.10
1,2,4-Trimethyl benzene	95-63-6	120	0.20	ND	0.98
Sec-Butylbenzene	135-98-8	134.22	0.20	ND	1.10
1,3-Dichlorobenzene	541-73-1	146	0.20	ND	1.19
P-Isopropyltoluene	99-87-6	134.22	0.20	ND	1.1
1,4-Dichlorobenzene	106-46-7	147	0.20	ND	1.20
1,2,3-Trimethylbenzene	526-73-8	120.2	0.20	ND	0.98
Benzyl Chloride	100-44-7	126.58	0.20	ND	1.04
n-butylbenzene	104-51-8	134.22	0.20	ND	1.1
1,2-Dichlorobenzene	95-50-1	146	0.20	ND	1.19
1,2,4-Trichlorobenzene	120-82-1	181.5	0.63	ND	4.64
Hexachloro-1,3-Butadiene	87-68-3	260.17	0.63	ND	6.70
Naphthalene	91-20-3	128.17	0.63	ND	3.30
TPH	n/a	101	200	ND	245.4



ANALYTICAL REPORT

April 12, 2022

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷GI

⁸AI

⁹SC

NYDEC

Sample Delivery Group: L1479041
Samples Received: 04/06/2022
Project Number:
Description: Roxy Cleaners

Report To: Chris Sanson
269 W. Jefferson Street
Syracuse, NY 13202

Entire Report Reviewed By:

Mark W. Beasley
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SAMPLE SUMMARY

8094-SV-02-4422 L1479041-01 Air			Collected by Jake Guy	Collected date/time 04/04/22 13:20	Received date/time 04/06/22 14:30	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1845396	1	04/08/22 22:28	04/08/22 22:28	CEP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG1845888	1	04/09/22 19:28	04/09/22 19:28	FKG	Mt. Juliet, TN
8094-SV-03-4422 L1479041-02 Air			Collected by Jake Guy	Collected date/time 04/04/22 13:30	Received date/time 04/06/22 14:30	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG1845396	1	04/08/22 22:57	04/08/22 22:57	CEP	Mt. Juliet, TN

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Mark W. Beasley
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ GI
- ⁸ AI
- ⁹ SC

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	MDL	RDL	Result	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	U		1	WG1845396
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	U		1	WG1845396
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	U		1	WG1845396
1,1-Dichloroethane	75-34-3	98	0.290	0.802	U		1	WG1845396
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	U		1	WG1845396
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	U		1	WG1845396
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	6.48		1	WG1845396
1,2-Dibromoethane	106-93-4	188	0.554	1.54	U		1	WG1845396
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	U		1	WG1845396
1,2-Dichloroethane	107-06-2	99	0.283	0.810	U		1	WG1845396
1,2-Dichloropropane	78-87-5	113	0.351	0.924	U		1	WG1845396
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	1.57		1	WG1845396
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	2.00		1	WG1845396
1,4-Dioxane	123-91-1	88.10	0.300	0.721	U		1	WG1845396
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	5.13		1	WG1845396
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	3.14		1	WG1845396
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	6.07		1	WG1845396
Benzene	71-43-2	78.10	0.228	0.639	4.09		1	WG1845396
Benzyl Chloride	100-44-7	127	0.311	1.04	U		1	WG1845396
Bromodichloromethane	75-27-4	164	0.471	1.34	U		1	WG1845396
Bromoform	75-25-2	253	0.757	6.21	U		1	WG1845396
Bromomethane	74-83-9	94.90	0.381	0.776	U		1	WG1845396
Carbon tetrachloride	56-23-5	154	0.461	1.26	U		1	WG1845396
Chlorobenzene	108-90-7	113	0.385	0.924	U		1	WG1845396
Chloroethane	75-00-3	64.50	0.263	0.528	U		1	WG1845396
Chloroform	67-66-3	119	0.349	0.973	U		1	WG1845396
Cyclohexane	110-82-7	84.20	0.259	0.689	3.79		1	WG1845396
Chloromethane	74-87-3	50.50	0.213	0.413	3.16		1	WG1845396
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	U		1	WG1845396
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	U		1	WG1845396
Dibromochloromethane	124-48-1	208	0.618	1.70	U		1	WG1845396
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	1.76		1	WG1845888
Ethylbenzene	100-41-4	106	0.362	0.867	4.03		1	WG1845396
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.94		1	WG1845396
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	U		1	WG1845396
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	U		1	WG1845396
n-Hexane	110-54-3	86.20	0.726	2.22	9.17		1	WG1845396
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	U		1	WG1845396
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	U		1	WG1845396
MTBE	1634-04-4	88.10	0.233	0.721	U		1	WG1845396
Methylene Chloride	75-09-2	84.90	0.340	0.694	0.764		1	WG1845396
Styrene	100-42-5	104	0.335	0.851	U		1	WG1845396
Tetrachloroethylene	127-18-4	166	0.553	1.36	0.917	J	1	WG1845396
Toluene	108-88-3	92.10	0.328	1.88	20.3		1	WG1845396
m&p-Xylene	1330-20-7	106	0.585	1.73	14.3		1	WG1845396
o-Xylene	95-47-6	106	0.359	0.867	5.85		1	WG1845396
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	U		1	WG1845396
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	U		1	WG1845396
Trichloroethylene	79-01-6	131	0.364	1.07	U		1	WG1845396
Vinyl chloride	75-01-4	62.50	0.243	0.511	0.291	J	1	WG1845396
Naphthalene	91-20-3	128	1.83	3.30	U		1	WG1845396
(S)-1,4-Bromofluorobenzene	460-00-4	175			99.4		60.0-140	WG1845396
(S)-1,4-Bromofluorobenzene	460-00-4	175			103		60.0-140	WG1845888

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	MDL	RDL	Result	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.400	1.09	U		1	WG1845396
1,1,2,2-Tetrachloroethane	79-34-5	168	0.511	1.37	U		1	WG1845396
1,1,2-Trichloroethane	79-00-5	133	0.422	1.09	U		1	WG1845396
1,1-Dichloroethane	75-34-3	98	0.290	0.802	U		1	WG1845396
1,1-Dichloroethene	75-35-4	96.90	0.302	0.793	U		1	WG1845396
1,2,4-Trichlorobenzene	120-82-1	181	1.10	4.66	U		1	WG1845396
1,2,4-Trimethylbenzene	95-63-6	120	0.375	0.982	5.60		1	WG1845396
1,2-Dibromoethane	106-93-4	188	0.554	1.54	U		1	WG1845396
1,2-Dichlorobenzene	95-50-1	147	0.770	1.20	U		1	WG1845396
1,2-Dichloroethane	107-06-2	99	0.283	0.810	U		1	WG1845396
1,2-Dichloropropane	78-87-5	113	0.351	0.924	U		1	WG1845396
1,3,5-Trimethylbenzene	108-67-8	120	0.382	0.982	1.42		1	WG1845396
1,4-Dichlorobenzene	106-46-7	147	0.335	1.20	U		1	WG1845396
1,4-Dioxane	123-91-1	88.10	0.300	0.721	U		1	WG1845396
2-Butanone (MEK)	78-93-3	72.10	0.240	3.69	5.37		1	WG1845396
1,3-Dichlorobenzene	541-73-1	147	1.09	1.20	1.80		1	WG1845396
2,2,4-Trimethylpentane	540-84-1	114.22	0.621	0.934	5.00		1	WG1845396
Benzene	71-43-2	78.10	0.228	0.639	3.10		1	WG1845396
Benzyl Chloride	100-44-7	127	0.311	1.04	7.43		1	WG1845396
Bromodichloromethane	75-27-4	164	0.471	1.34	U		1	WG1845396
Bromoform	75-25-2	253	0.757	6.21	U		1	WG1845396
Bromomethane	74-83-9	94.90	0.381	0.776	U		1	WG1845396
Carbon tetrachloride	56-23-5	154	0.461	1.26	U		1	WG1845396
Chlorobenzene	108-90-7	113	0.385	0.924	U		1	WG1845396
Chloroethane	75-00-3	64.50	0.263	0.528	U		1	WG1845396
Chloroform	67-66-3	119	0.349	0.973	1.06		1	WG1845396
Cyclohexane	110-82-7	84.20	0.259	0.689	2.97		1	WG1845396
Chloromethane	74-87-3	50.50	0.213	0.413	2.48		1	WG1845396
cis-1,2-Dichloroethene	156-59-2	96.90	0.311	0.793	U		1	WG1845396
cis-1,3-Dichloropropene	10061-01-5	111	0.313	0.908	U		1	WG1845396
Dibromochloromethane	124-48-1	208	0.618	1.70	U		1	WG1845396
Dichlorodifluoromethane	75-71-8	120.92	0.678	0.989	2.26		1	WG1845396
Ethylbenzene	100-41-4	106	0.362	0.867	3.57		1	WG1845396
Trichlorofluoromethane	75-69-4	137.40	0.460	1.12	1.79		1	WG1845396
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.608	1.53	U		1	WG1845396
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.622	1.40	U		1	WG1845396
n-Hexane	110-54-3	86.20	0.726	2.22	6.28		1	WG1845396
Hexachloro-1,3-butadiene	87-68-3	261	1.12	6.73	U		1	WG1845396
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	0.313	5.12	U		1	WG1845396
MTBE	1634-04-4	88.10	0.233	0.721	U		1	WG1845396
Methylene Chloride	75-09-2	84.90	0.340	0.694	1.54		1	WG1845396
Styrene	100-42-5	104	0.335	0.851	U		1	WG1845396
Tetrachloroethylene	127-18-4	166	0.553	1.36	1.97		1	WG1845396
Toluene	108-88-3	92.10	0.328	1.88	16.9		1	WG1845396
m&p-Xylene	1330-20-7	106	0.585	1.73	12.7		1	WG1845396
o-Xylene	95-47-6	106	0.359	0.867	5.20		1	WG1845396
trans-1,2-Dichloroethene	156-60-5	96.90	0.267	0.793	U		1	WG1845396
trans-1,3-Dichloropropene	10061-02-6	111	0.331	0.908	U		1	WG1845396
Trichloroethylene	79-01-6	131	0.364	1.07	0.428	J	1	WG1845396
Vinyl chloride	75-01-4	62.50	0.243	0.511	U		1	WG1845396
Naphthalene	91-20-3	128	1.83	3.30	U		1	WG1845396
(S)-1,4-Bromofluorobenzene	460-00-4	175			99.9		60.0-140	WG1845396

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ GI⁸ Al⁹ Sc

QUALITY CONTROL SUMMARY

L1479041-01,02

Method Blank (MB)

(MB) R3779272-3 04/08/22 09:56

Analyte	MB Result ug/m3	MB Qualifier	MB MDL ug/m3	MB RDL ug/m3	
1,1,1-Trichloroethane	U		0.400	1.09	¹ Cp
1,1,2,2-Tetrachloroethane	U		0.511	1.37	² Tc
1,1,2-Trichloroethane	U		0.422	1.09	³ Ss
1,1-Dichloroethane	U		0.290	0.802	⁴ Cn
1,1-Dichloroethene	U		0.302	0.793	⁵ Sr
1,2,4-Trichlorobenzene	U		1.10	4.66	⁶ Qc
1,2,4-Trimethylbenzene	U		0.375	0.982	⁷ Gl
1,2-Dibromoethane	U		0.554	1.54	⁸ Al
1,2-Dichlorobenzene	U		0.770	1.20	⁹ Sc
1,2-Dichloroethane	U		0.283	0.810	
1,2-Dichloropropane	U		0.351	0.924	
1,3,5-Trimethylbenzene	U		0.382	0.982	
1,4-Dichlorobenzene	U		0.335	1.20	
1,4-Dioxane	U		0.300	0.721	
2-Butanone (MEK)	U		0.240	3.69	
1,3-Dichlorobenzene	U		1.09	1.20	
2,2,4-Trimethylpentane	U		0.621	0.934	
Benzene	U		0.228	0.639	
Benzyl Chloride	U		0.311	1.04	
Bromodichloromethane	U		0.471	1.34	
Bromoform	U		0.757	6.21	
Bromomethane	U		0.381	0.776	
Carbon tetrachloride	U		0.461	1.26	
Chlorobenzene	U		0.385	0.924	
Chloroethane	U		0.263	0.528	
Chloroform	U		0.349	0.973	
Cyclohexane	U		0.259	0.689	
Chloromethane	U		0.213	0.413	
cis-1,2-Dichloroethene	U		0.311	0.793	
cis-1,3-Dichloropropene	U		0.313	0.908	
Dibromochloromethane	U		0.618	1.70	
Dichlorodifluoromethane	U		0.678	0.989	
Ethylbenzene	U		0.362	0.867	
Trichlorofluoromethane	U		0.460	1.12	
1,1,2-Trichlorotrifluoroethane	U		0.608	1.53	
1,2-Dichlorotetrafluoroethane	U		0.622	1.40	
n-Hexane	U		0.726	2.22	
Hexachloro-1,3-butadiene	U		1.12	6.73	
4-Methyl-2-pentanone (MIBK)	U		0.313	5.12	
MTBE	U		0.233	0.721	

QUALITY CONTROL SUMMARY

L1479041-01,02

Method Blank (MB)

(MB) R3779272-3 04/08/22 09:56

Analyte	MB Result ug/m3	MB Qualifier	MB MDL ug/m3	MB RDL ug/m3
Methylene Chloride	U		0.340	0.694
Styrene	U		0.335	0.851
Tetrachloroethylene	U		0.553	1.36
Toluene	U		0.328	1.88
m&p-Xylene	U		0.585	1.73
o-Xylene	U		0.359	0.867
trans-1,2-Dichloroethene	U		0.267	0.793
trans-1,3-Dichloropropene	U		0.331	0.908
Trichloroethylene	U		0.364	1.07
Vinyl chloride	U		0.243	0.511
Naphthalene	U		1.83	3.30
(S) 1,4-Bromofluorobenzene	97.9		60.0-140	

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3779272-1 04/08/22 08:57 • (LCSD) R3779272-2 04/08/22 09:27

Analyte	Spike Amount ug/m3	LCS Result ug/m3	LCSD Result ug/m3	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,1-Trichloroethane	20.4	23.3	23.0	114	113	70.0-130			1.65	25
1,1,2,2-Tetrachloroethane	25.8	30.0	29.6	117	115	70.0-130			1.38	25
1,1,2-Trichloroethane	20.4	23.0	22.5	113	110	70.0-130			2.15	25
1,1-Dichloroethane	15.0	17.2	16.9	115	112	70.0-130			2.12	25
1,1-Dichloroethene	14.9	16.6	16.2	111	109	70.0-130			1.93	25
1,2,4-Trichlorobenzene	27.8	32.3	32.4	116	117	70.0-160			0.229	25
1,2,4-Trimethylbenzene	18.4	22.0	21.7	120	118	70.0-130			1.35	25
1,2-Dibromoethane	28.8	32.8	32.2	114	112	70.0-130			1.66	25
1,2-Dichlorobenzene	22.5	25.7	25.4	114	113	70.0-130			0.941	25
1,2-Dichloroethane	15.2	17.3	17.0	114	112	70.0-130			1.65	25
1,2-Dichloropropane	17.3	19.6	19.2	113	111	70.0-130			1.90	25
1,3,5-Trimethylbenzene	18.4	21.8	21.5	118	117	70.0-130			1.36	25
1,4-Dichlorobenzene	22.5	26.3	25.9	117	115	70.0-130			1.38	25
1,4-Dioxane	13.5	16.1	15.7	119	116	70.0-140			2.27	25
Methyl Ethyl Ketone	11.1	12.7	12.4	115	112	70.0-130			2.35	25
1,3-Dichlorobenzene	22.5	25.6	25.4	113	113	70.0-130			0.472	25
2,2,4-Trimethylpentane	17.5	20.3	19.9	116	113	70.0-130			2.10	25
Benzene	12.0	13.6	13.2	114	110	70.0-130			2.86	25
Benzyl Chloride	19.5	20.3	19.9	104	102	70.0-152			1.55	25
Bromodichloromethane	25.2	29.0	28.4	115	113	70.0-130			2.11	25
Bromoform	38.8	45.5	44.8	117	115	70.0-130			1.60	25

QUALITY CONTROL SUMMARY

L1479041-01,02

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3779272-1 04/08/22 08:57 • (LCSD) R3779272-2 04/08/22 09:27

Analyte	Spike Amount ug/m3	LCS Result ug/m3	LCSD Result ug/m3	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromomethane	14.6	16.0	15.9	110	109	70.0-130			0.488	25
Carbon tetrachloride	23.6	26.6	26.2	113	111	70.0-130			1.43	25
Chlorobenzene	17.3	19.2	19.1	111	110	70.0-130			0.724	25
Chloroethane	9.89	10.8	10.4	109	105	70.0-130			4.23	25
Chloroform	18.3	21.1	20.6	116	113	70.0-130			2.33	25
Cyclohexane	12.9	14.8	14.5	115	112	70.0-130			2.35	25
Chloromethane	7.75	8.74	8.45	113	109	70.0-130			3.37	25
cis-1,2-Dichloroethene	14.9	17.2	16.8	116	113	70.0-130			2.33	25
cis-1,3-Dichloropropene	17.0	20.3	19.9	119	117	70.0-130			2.03	25
Dibromochloromethane	31.9	37.4	36.2	117	113	70.0-130			3.47	25
Dichlorodifluoromethane	18.5	20.8	20.5	112	110	64.0-139			1.44	25
Ethylbenzene	16.3	18.7	18.6	115	114	70.0-130			0.930	25
Trichlorodifluoromethane	21.1	23.3	22.8	110	108	70.0-130			1.95	25
1,1,2-Trichlorotrifluoroethane	28.7	31.8	31.1	111	108	70.0-130			2.19	25
1,2-Dichlorotetrafluoroethane	26.2	29.1	28.5	111	109	70.0-130			1.94	25
n-Hexane	13.2	15.4	14.9	117	113	70.0-130			3.25	25
Hexachloro-1,3-butadiene	40.0	45.9	45.7	115	114	70.0-151			0.466	25
4-Methyl-2-pentanone (MIBK)	15.4	18.6	18.2	121	119	70.0-139			2.22	25
MTBE	13.5	16.0	15.6	119	115	70.0-130			2.73	25
Methylene Chloride	13.0	14.4	14.1	111	108	70.0-130			2.44	25
Styrene	16.0	18.3	18.4	115	115	70.0-130			0.695	25
Tetrachloroethylene	25.5	28.0	27.7	110	109	70.0-130			1.22	25
Toluene	14.1	16.0	15.7	113	111	70.0-130			1.90	25
m&p-Xylene	32.5	38.4	38.2	118	117	70.0-130			0.679	25
o-Xylene	16.3	18.9	18.8	116	115	70.0-130			0.690	25
trans-1,2-Dichloroethene	14.9	16.6	16.2	112	109	70.0-130			2.17	25
trans-1,3-Dichloropropene	17.0	20.6	19.7	121	115	70.0-130			4.74	25
Trichloroethylene	20.1	22.4	22.0	112	109	70.0-130			2.17	25
Vinyl chloride	9.59	10.9	10.6	114	111	70.0-130			2.85	25
Naphthalene	19.6	24.7	24.5	126	125	70.0-159			0.639	25
(S) 1,4-Bromofluorobenzene			101	100	60.0-140					

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

QUALITY CONTROL SUMMARY

[L1479041-01](#)

Method Blank (MB)

(MB) R3779328-3 04/09/22 10:02

Analyte	MB Result ug/m3	MB Qualifier	MB MDL ug/m3	MB RDL ug/m3
Dichlorodifluoromethane	U		0.678	0.989
(S) 1,4-Bromofluorobenzene	97.0			60.0-140

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3779328-1 04/09/22 08:40 • (LCSD) R3779328-2 04/09/22 09:22

Analyte	Spike Amount ug/m3	LCS Result ug/m3	LCSD Result ug/m3	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits %
Dichlorodifluoromethane	18.5	20.0	19.6	108	106	64.0-139			2.00	25
(S) 1,4-Bromofluorobenzene			80.7	81.7	80.7	60.0-140				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.	¹ Cp
RDL	Reported Detection Limit.	² Tc
Rec.	Recovery.	³ Ss
RPD	Relative Percent Difference.	⁴ Cn
SDG	Sample Delivery Group.	⁵ Sr
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.	⁶ Qc
U	Not detected at the Reporting Limit (or MDL where applicable).	⁷ Gl
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.	⁸ Al
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.	⁹ Sc
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.	
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.	
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.	
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.	
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.	
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.	
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.	
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.	
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.	

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey—NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio—VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

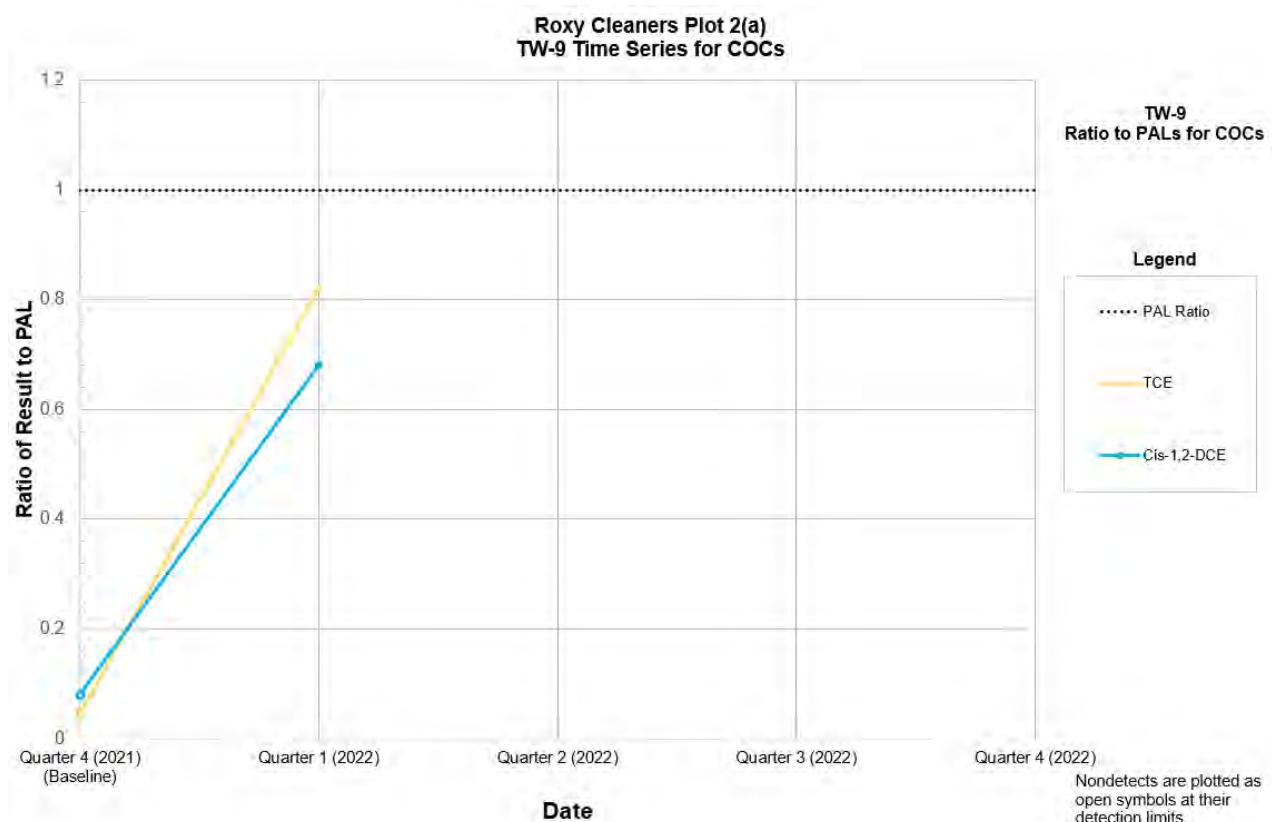
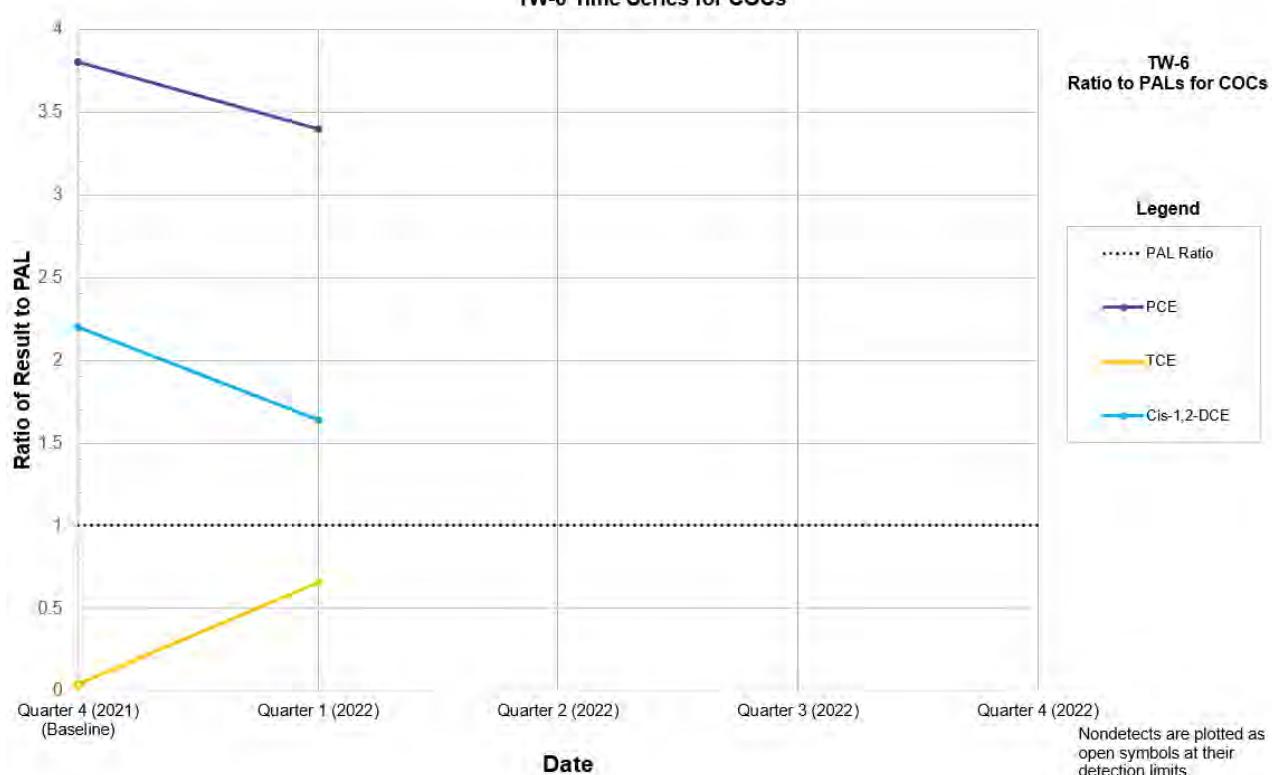
⁹ Sc

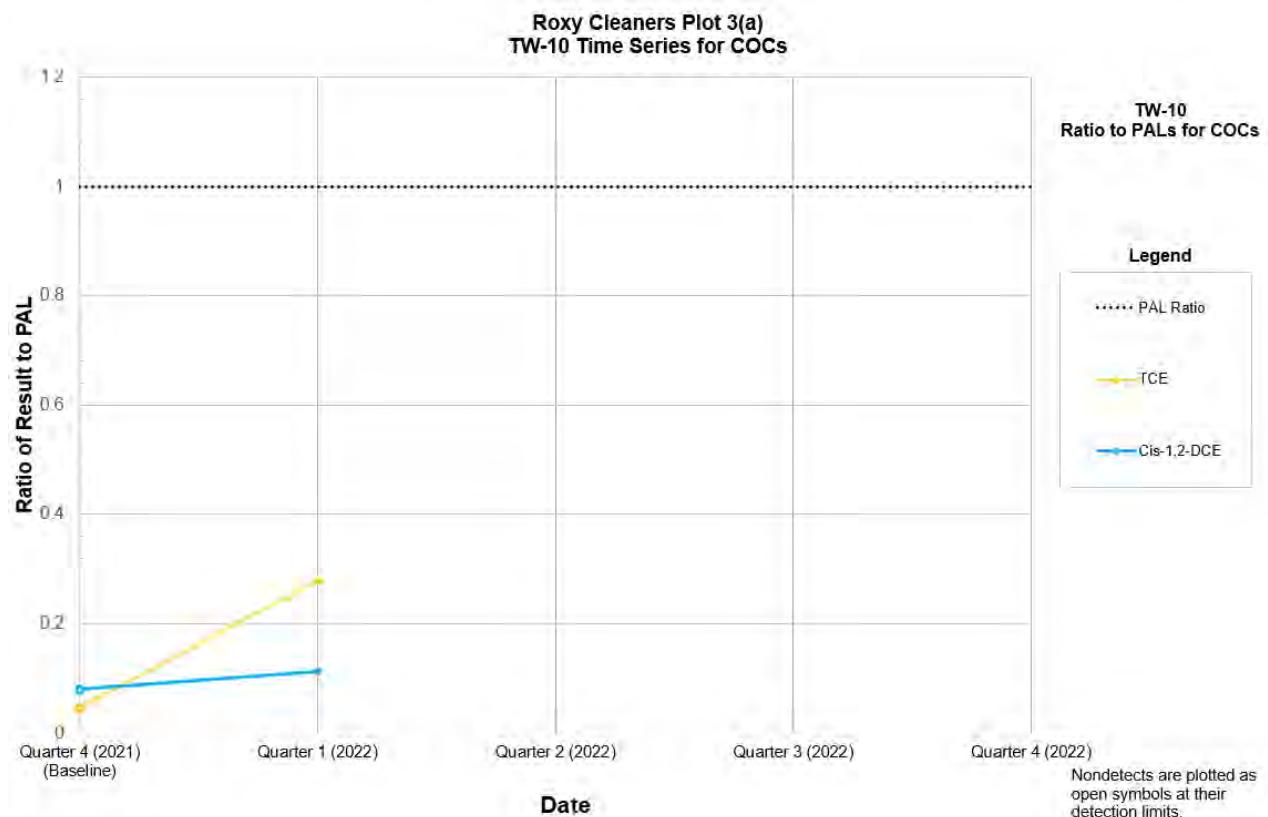
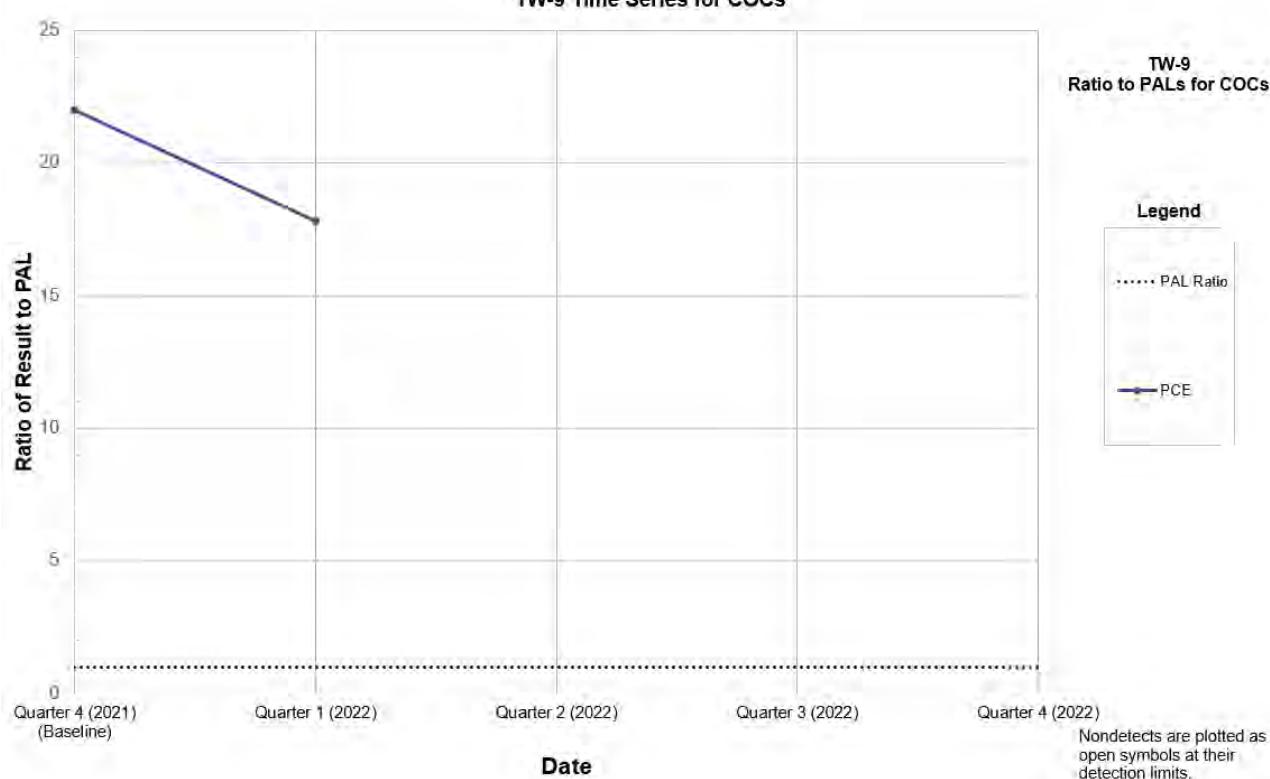
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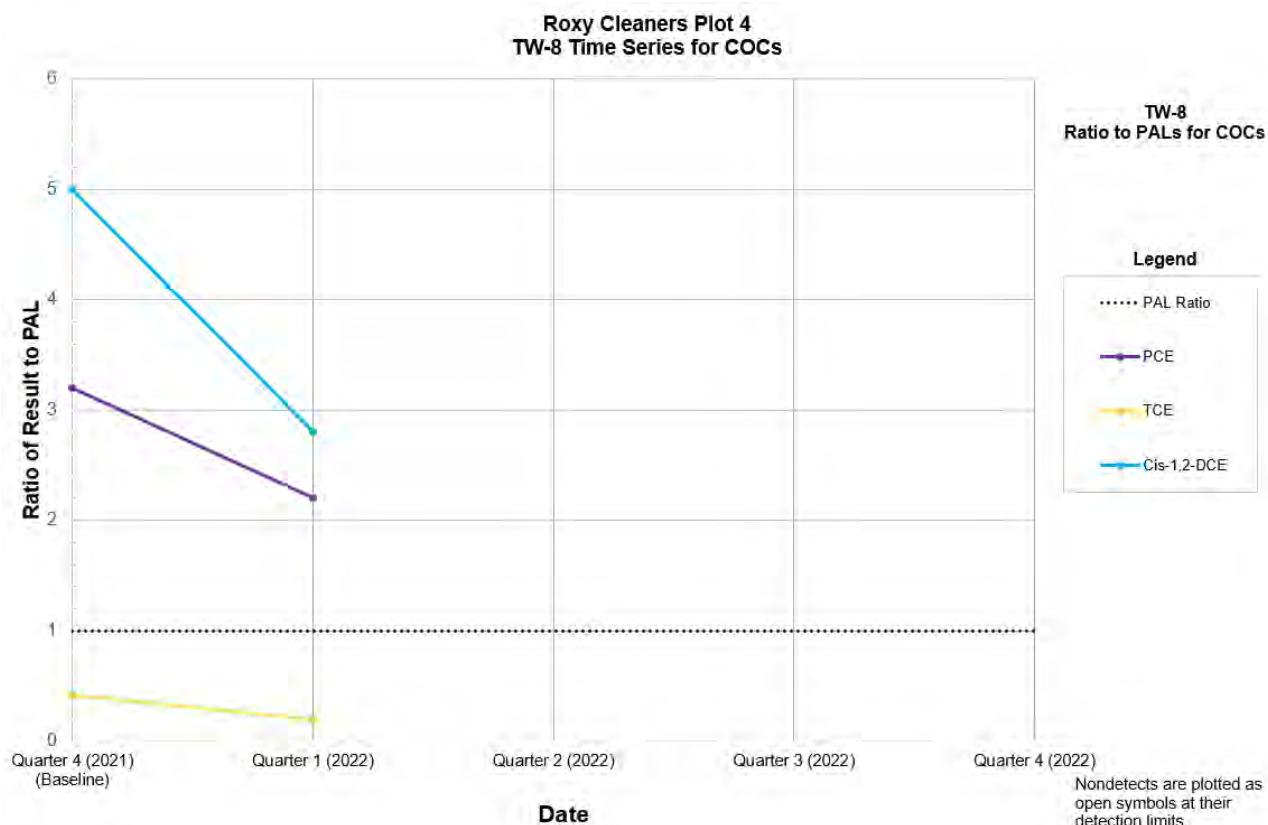
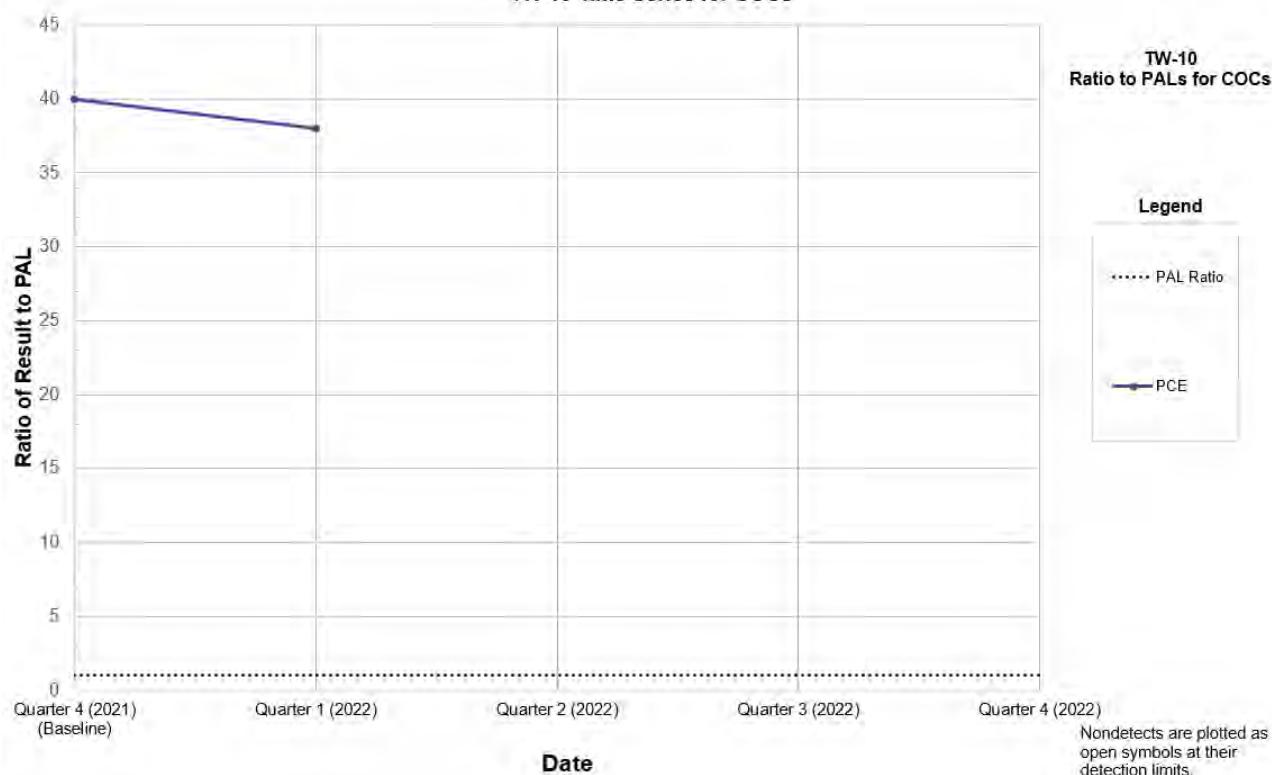
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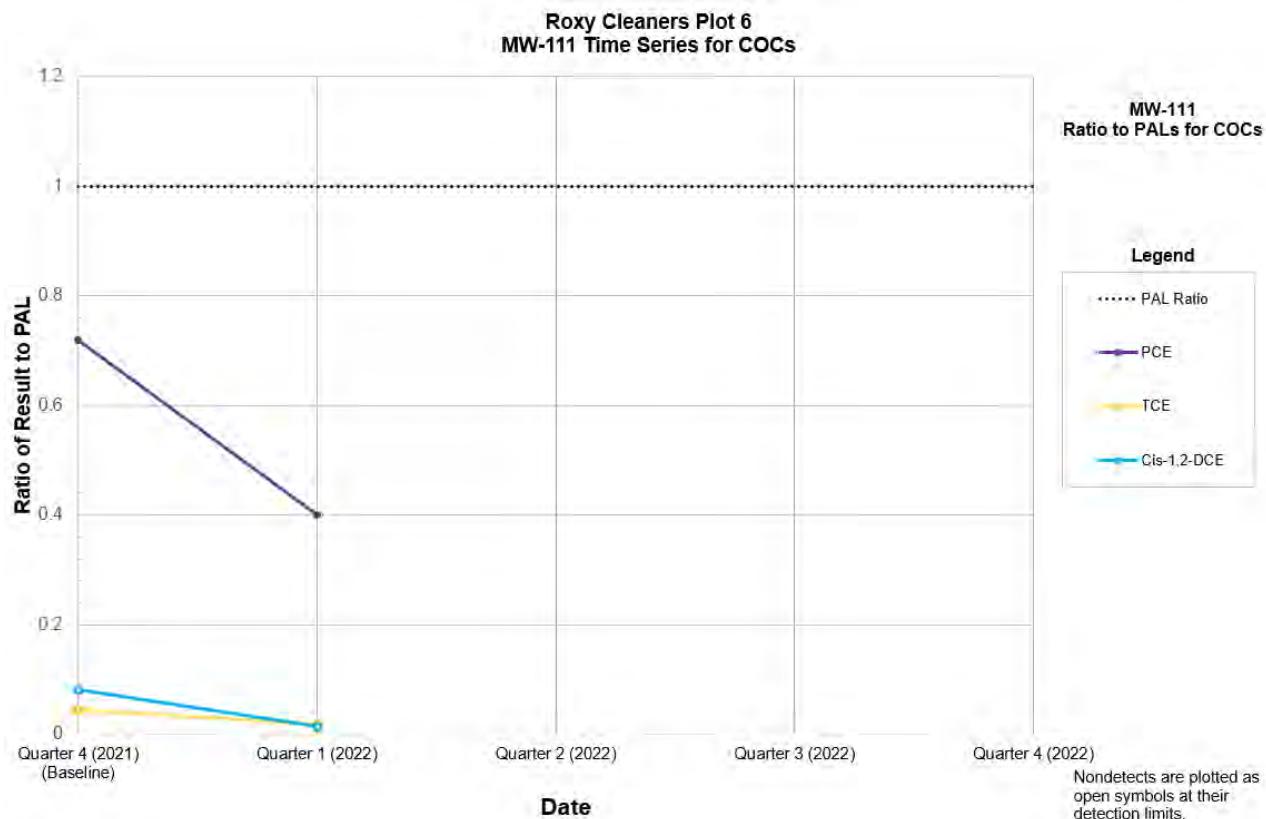
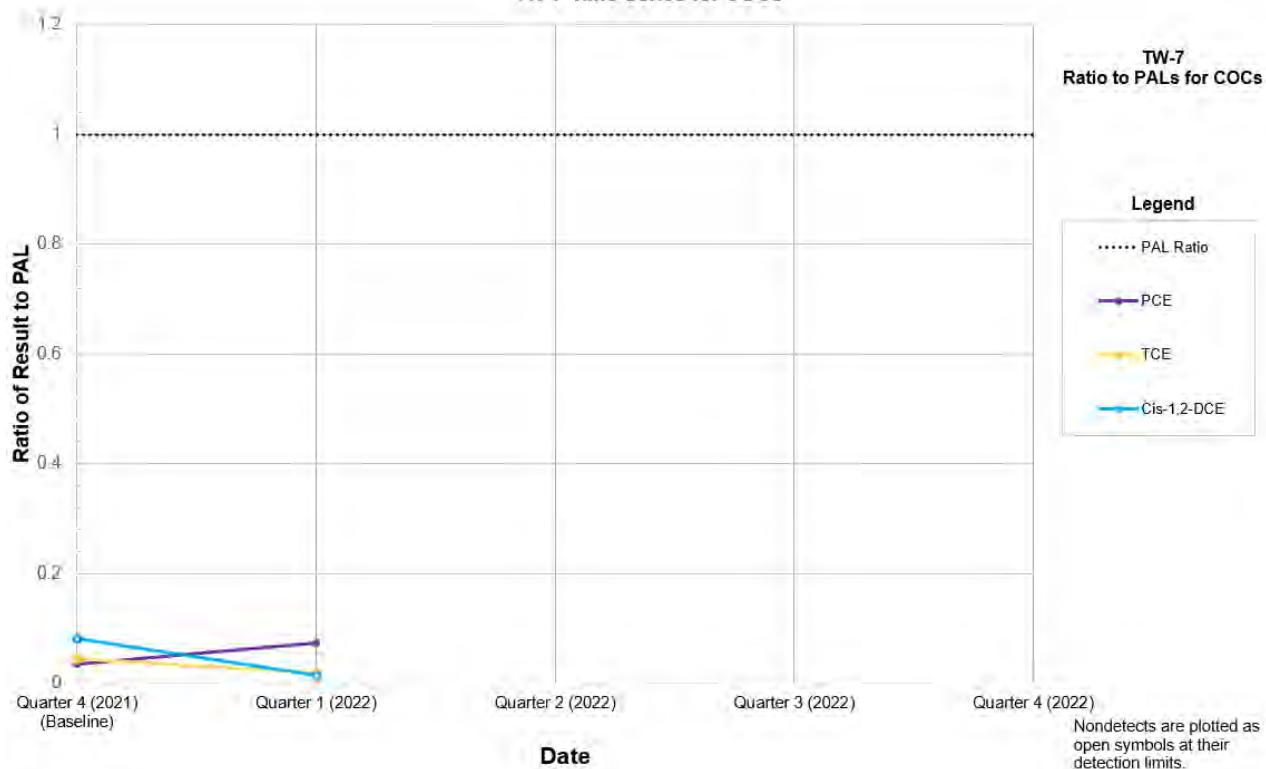
Groundwater Time Series Plots

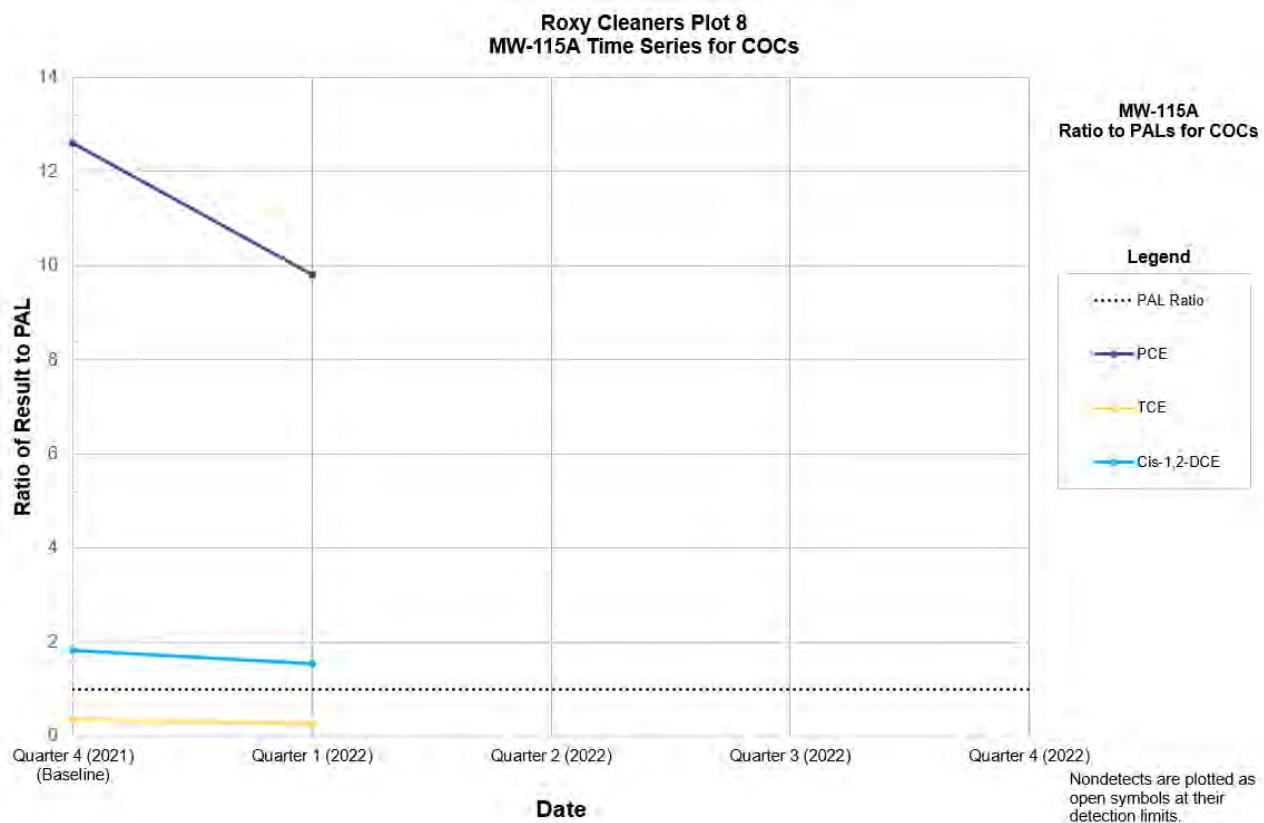
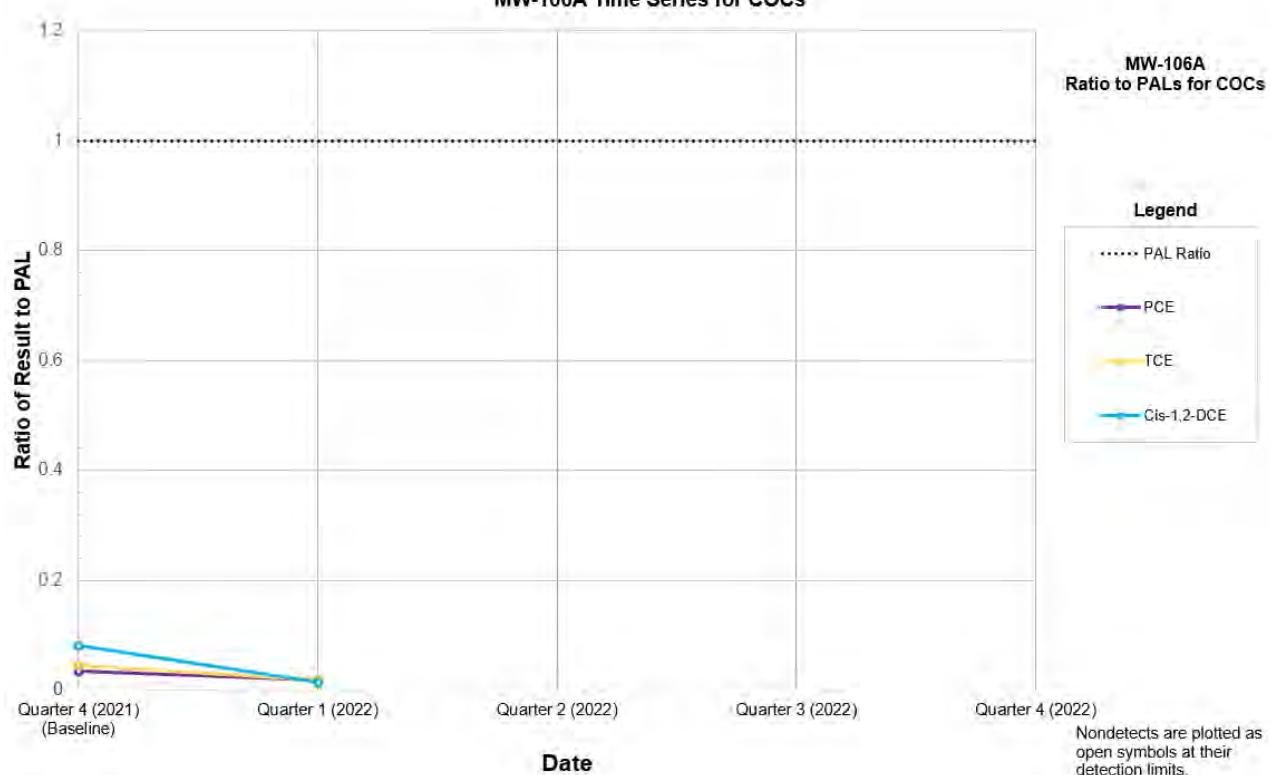
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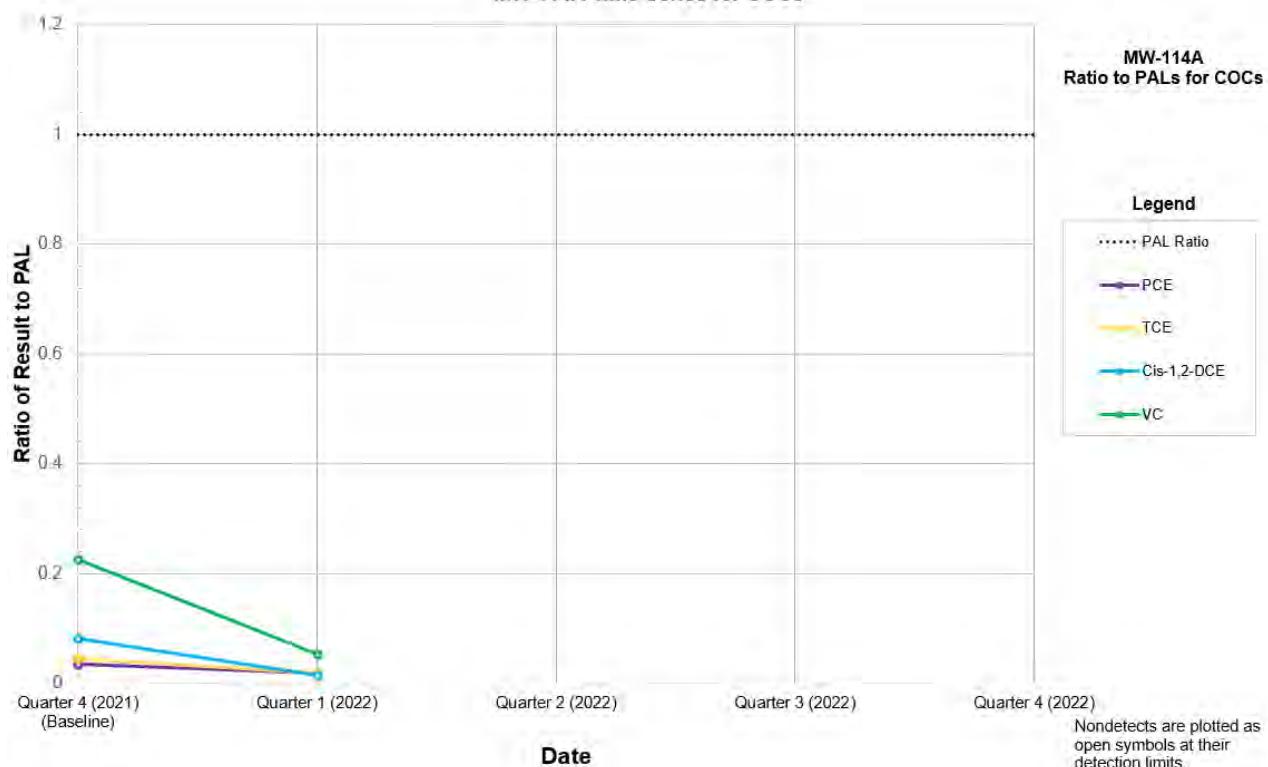








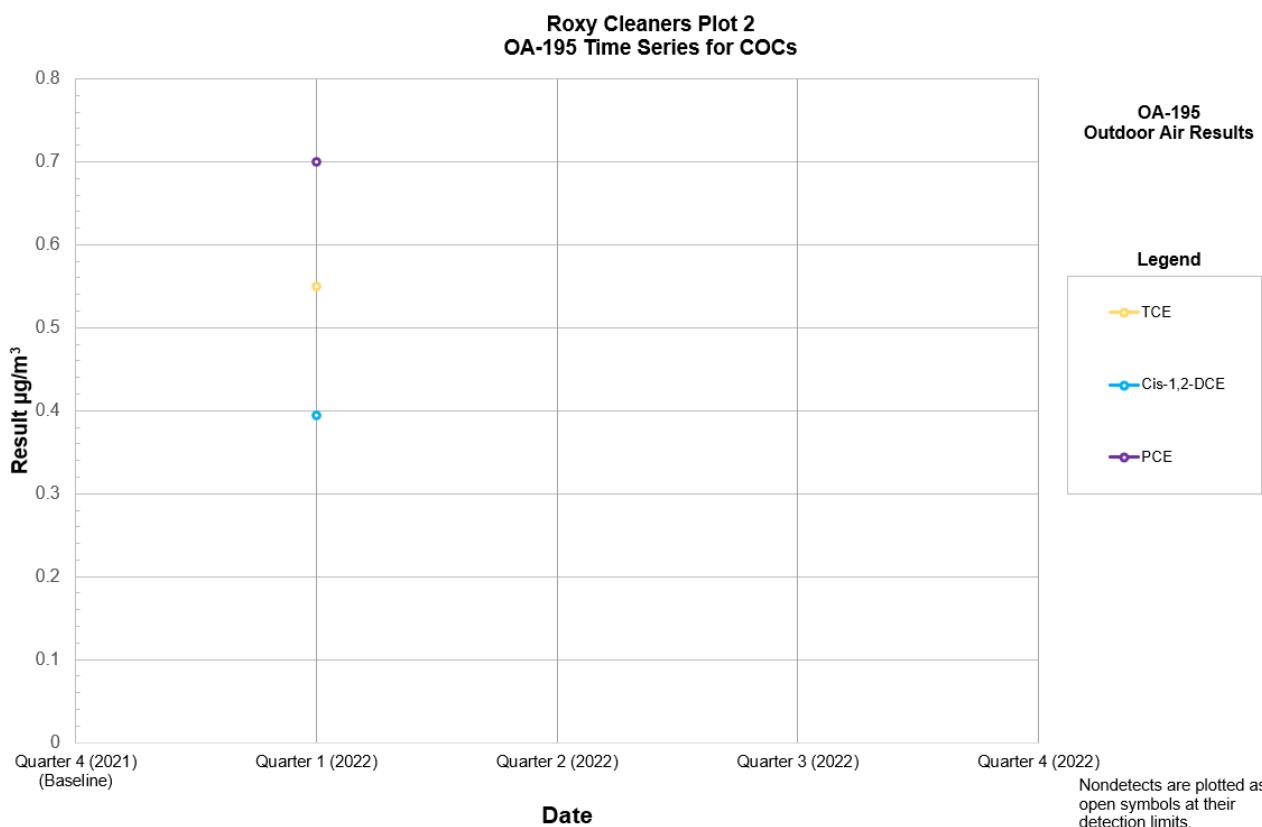
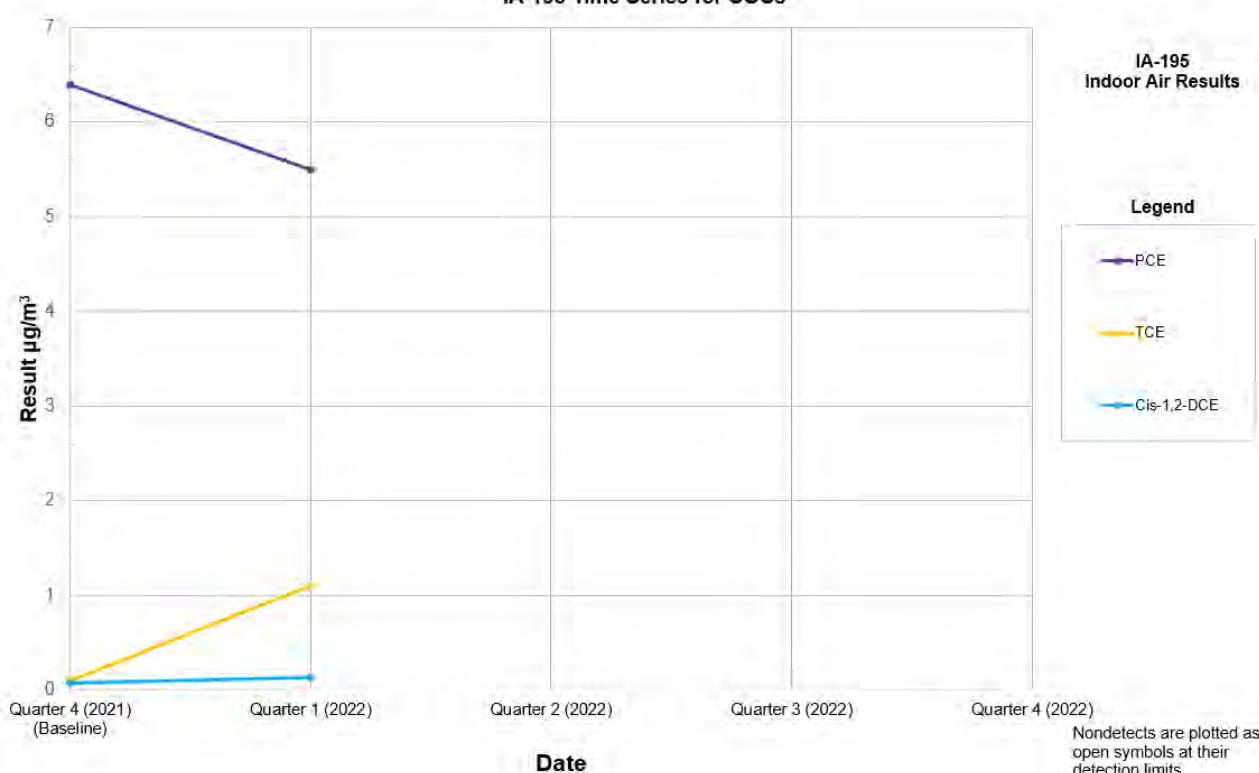


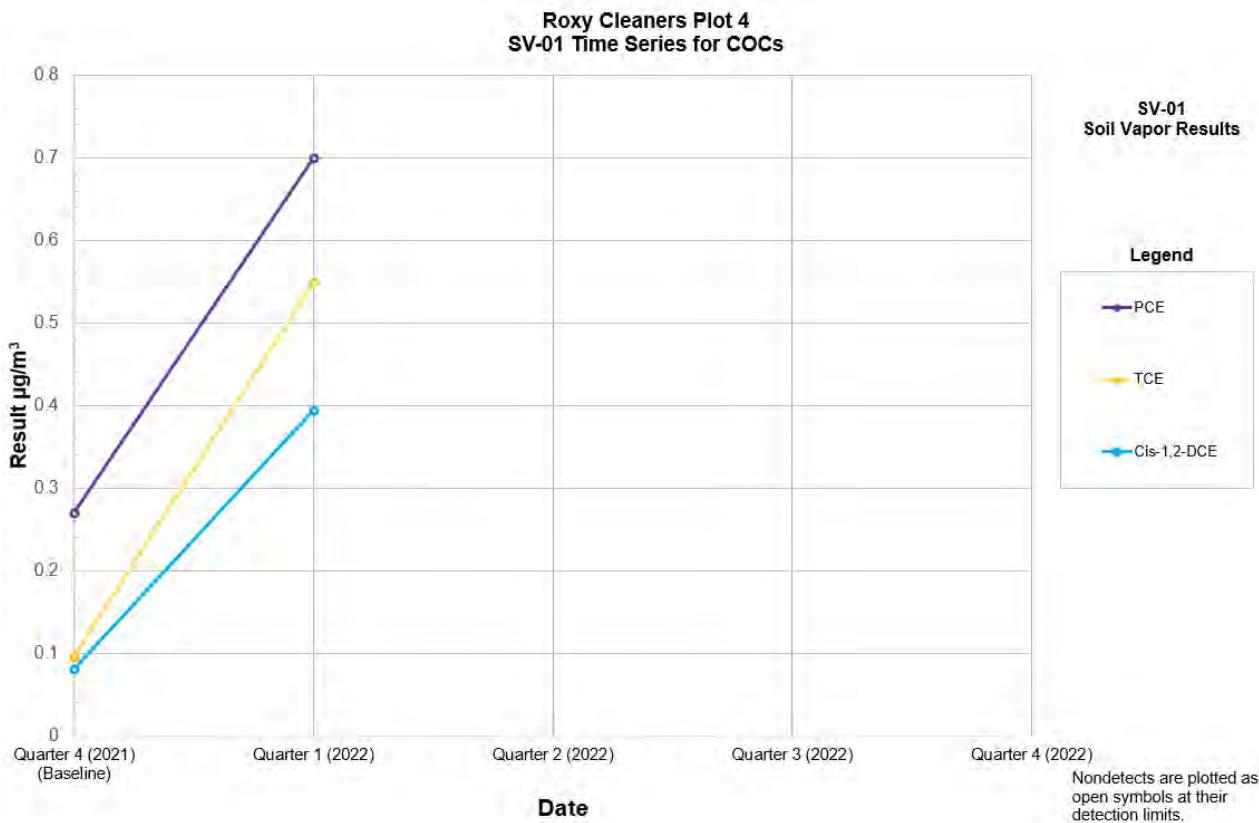
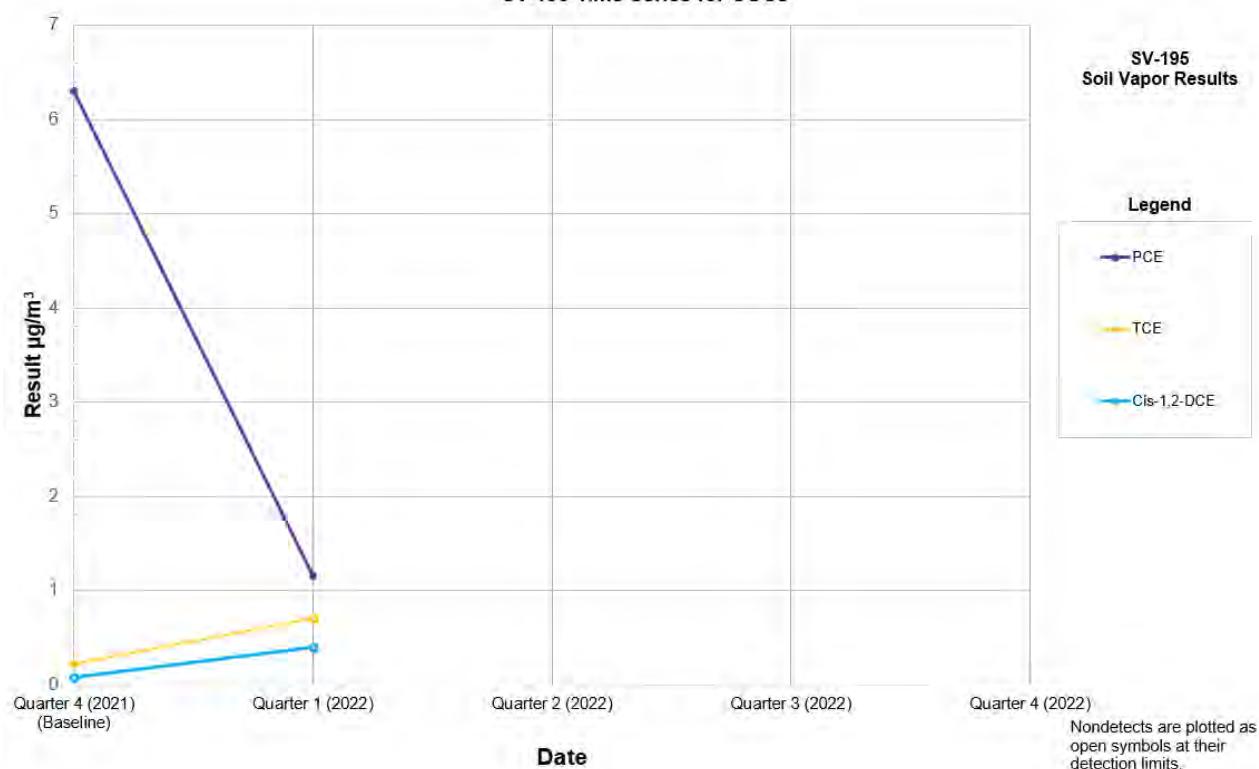


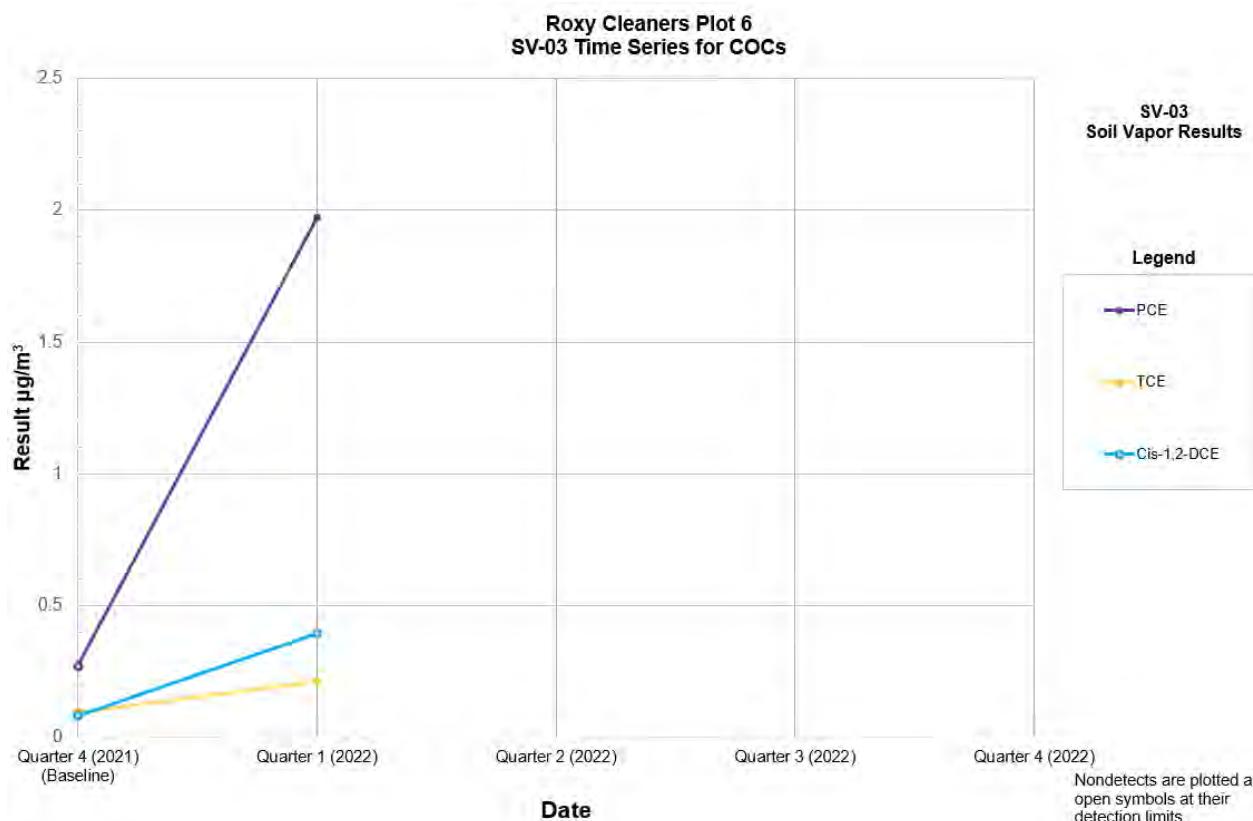
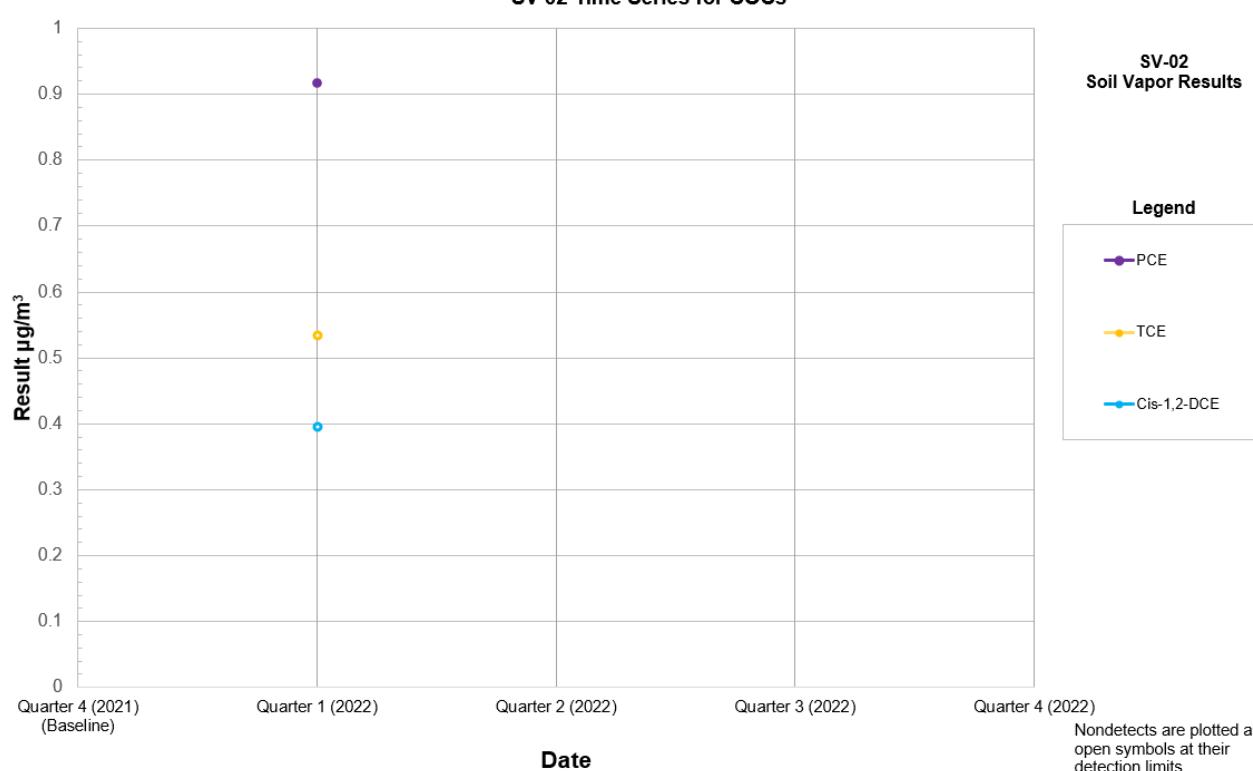
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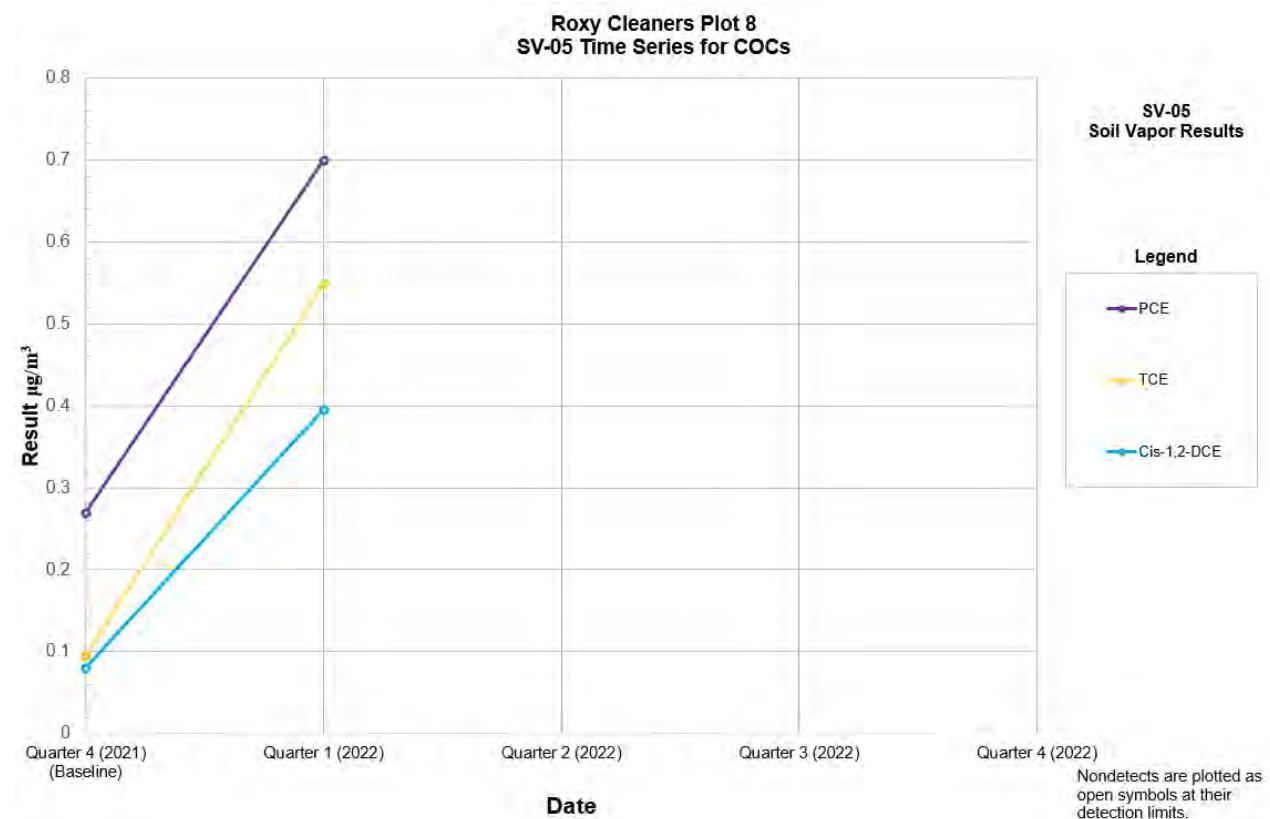
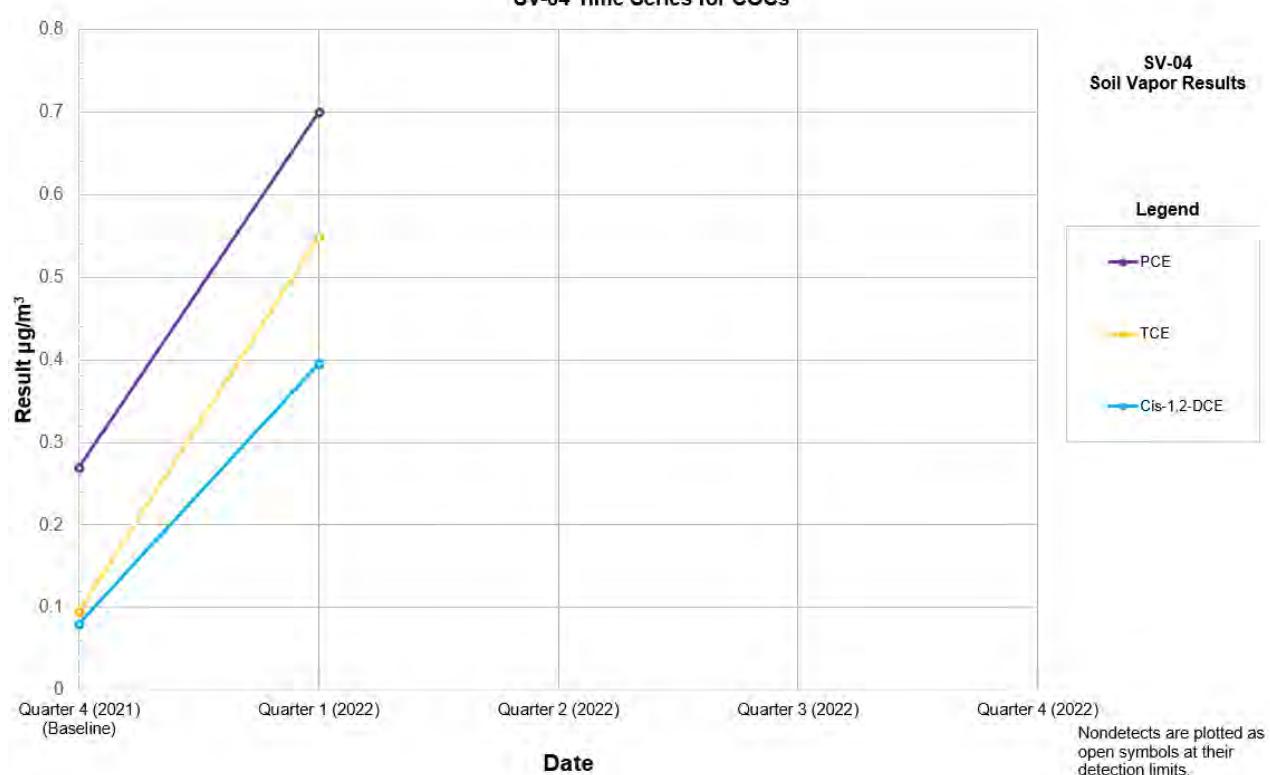
Air and Soil Vapor Time Series Plots

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Appendix G

Data Validation Reports

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DATA VALIDATION REPORT

Roxy Cleaners

TO-15

SDG: 22C1325

Chemical Analyses Performed by:

Pace Con-Test

Prepared by

ENVIRONMENTAL DATA SERVICES, LTD.

Prepared for

EA Engineering, Science and Technology, Inc.

May 9, 2022



DATA USABILITY SUMMARY REPORT FOR VOLATILES

SITE: Roxy Cleaners

LABORATORY: Pace Con-Test

SAMPLE DELIVERY GROUP: 22C1325

SAMPLE DATES: 03/16/2022

VALIDATION LEVEL: 4

This sample delivery group consist of the following samples:

Sample Identification	Laboratory Identification
IA-[REDACTED]	22C1325-01
SV-[REDACTED]	22C1325-02

The samples described above were analyzed via methods USEPA TO-15 and/or USEPA TO-15 SIM to determine the concentrations of trace volatile organic analytes (VOAs) in air samples.

Project specific quality assurance (QA) objectives, as well as the USEPA Region II SOP, Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method TO-15 Data Validation, HW-31, Rev. 6, June 2014 have been considered during validation of this data and its usability.

Table 1 provides a summary of major and minor data quality issues identified for this data set. All data are acceptable except those results which have been qualified with "R", rejected. Data validation qualifiers along with associated descriptions are provided in Table 2. All data qualification related to this group of samples is detailed on the attached sheets.

Per USEPA Region 2 Validation Guidance, "All data users should note two facts. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables even as a last resort. The second, no analyte concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error."

HOLDING TIME/SAMPLE HANDLING

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Proper sample handling and preservation also play a role in the chemical stability of analytes in the sample matrix. If samples are not collected and stored using proper containers and/or preservatives, data may not be valid.

The samples in this delivery group were prepared and analyzed within the holding time specified in the validation guidelines.

BLANK CONTAMINATION

Quality assurance blanks include method, storage, trip, field, or rinse blanks. Blanks are prepared to identify any contamination, which may have been introduced into the samples during preparation and analysis or field activity. Method and storage blanks measure laboratory contamination. Trip blanks measure cross contamination during shipment. Field and rinse blanks measure cross contamination during field operations.

Method Blanks

Method blanks were prepared and analyzed in association with the samples in this delivery group at the specified frequency. Upon examination of method blank data, no analyte was positively identified at a concentration equal to or above the method detection limit (MDL) in any associated method blank.

Storage Blanks

No storage blanks were required for this sample delivery group (SDG).

Trip Blanks

No trip blanks were submitted in association with this SDG.

Field Blanks

No field blanks were submitted in association with this SDG.

MASS SPECTROMETER TUNING

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances.

The tuning standard for volatiles is bromofluorobenzene (BFB).

All tunes associated with this SDG were fully compliant.

CALIBRATION

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative results. The initial calibration curve demonstrates that the instrument is capable of giving acceptable performance at the beginning of an analytical sequence. The continuing calibration verifies that the instrument is continuing to provide satisfactory daily performance. Additionally, a continuing calibration is analyzed at the end of each 24-hour analytical sequence, denoted as a "closing" calibration verification and ascertains acceptable performance at the conclusion of the analytical sequence.

Note, no closing continuing calibration verifications were performed in association with this SDG.

Response Factor

The relative response factor (RRF) measures the instruments responses to specific chemical compounds. The RRFs for the volatile organic analysis (VOA) target compound list (TCL) must be ≥ 0.05 in both the initial and continuing calibrations with exception of poor response compounds, where RRFs must be ≥ 0.01 . Additionally, the RRF in the closing continuing calibration must be ≥ 0.01 . A value less than the respective criteria indicates serious detection and quantitation problems. If the mean RRF of the initial calibration or the continuing calibration RRF is < 0.05 , or < 0.01 for poor response compounds, or the RRF for the closing continuing calibration is < 0.01 for any analyte, those analytes detected in environmental samples will be qualified as estimated. All non-detects for those analytes will be rejected.

The RRF values in all initial and continuing calibrations were found to be acceptable in all cases.

Percent Relative Standard Deviation and Percent Deviation

Percent relative standard deviation (%RSD) is calculated from the initial calibration and is used to indicate stability of a specific compound over the calibration range. Percent deviation (%D) compares the response factor of the continuing calibration with the mean response factor of the initial calibration. Therefore, %D is a measure of the instrument's daily performance.

The following QC criteria have been applied for this project:

The %RSD of initial calibration must be $< 30\%$.

An RSD value outside initial calibration limit indicates the potential for quantitation errors. For this reason, all positive results are qualified as estimated. Severe performance failures ($RSD > 90\%$) require qualification of non-detected results as well.

The %D for continuing calibration must be $< 30\%$.

A value outside these limits indicates the potential for detection and quantitation errors. For these reasons, all positive results are qualified as estimated, and non-detects are qualified with "UJ".

All initial calibration and continuing calibration %RSD and %D values were within defined QC criteria or did not result in a need to qualify sample results with the following exceptions.

The %D values for the target analytes vinyl acetate and ethyl acetate were outside of acceptance limits for the initial calibration verification. All samples are associated with the non-compliant initial calibration verification. The results reported for vinyl acetate and ethyl acetate have been qualified "J" or "UJ" as appropriate on this basis

The %D values for the target analytes 1,2,4-Trichlorobenzene and ethyl acetate were outside of acceptance limits for one continuing calibration verification. All samples are associated with the non-

compliant continuing calibration verification. The results reported for 1,2,4-trichlorobenzene have been qualified "J" or "UJ" as appropriate on this basis.

INTERNAL STANDARDS PERFORMANCE

Internal standard performance criteria are meant to ensure that the gas chromatography/mass spectrometry (GC/MS) sensitivity and response are stable during every experimental run.

The internal standard area count must not vary by more than a factor of two from the associated continuing calibration standard. The retention time of the internal standard must not vary by more than +/- 20 seconds from the associated continuing calibration standard. The area count must be within -60% to +140% range of the associated standard. If area count is >140% non-detected results are not qualified while positive results are qualified "J", estimated. However, when an observed area count is <60%, positive results are qualified "J" estimated while non-detected results are rejected.

The reported analysis for all samples, lab control sample, and associated method blanks had internal standard areas and retention times within QC criteria in all cases.

COMPOUND IDENTIFICATION

Volatile

The TCL compounds are identified on the GC/MS by using the analytes relative retention time (RRT) and ion spectra. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound, and have ion spectra which has a ratio of the primary and secondary ion intensities within 20% of that in the standard compound. In the cases where there is not an adequate ion spectrum match, the laboratory may have provided false positive identifications.

All identification criteria were met. Therefore, no analytes were qualified for compound identification.

Volatile Tentatively Identified Compounds

Tentatively Identified Compounds (TICs) were reported by the laboratory and reviewed for quality assurance. For all TIC results where there is presumptive evidence of a match, being greater than or equal to an 85% match, the results are qualified "NJ", tentatively identified. If the non-target compound is reported as an unknown, the result is qualified "J", estimated. Likewise, if it is determined that the identification of a TIC is unacceptable, the tentative identification of the compound is changed to "unknown" and the result is qualified "J", estimated.

Tentatively identified compounds were not reported by the laboratory and were not evaluated for this program.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample (LCS) is spiked with the same analytes at the same concentrations as the matrix spike. The LCS results are used to verify that the laboratory can perform the analysis in a clean matrix.

All LCS evaluations resulted in acceptable recoveries or did not result in a need to qualify sample results with the following exceptions. The observed recoveries for hexachlorobutadiene, 1,2,4-trichlorobenzene and ethyl acetate were lower than the lowest acceptance limit during the evaluation of LCS B304046-BS1 associated with all samples in this SDG. The affected results were qualified "J" or "UJ" as appropriate on this basis.

REPORTING

Samples SV-[REDACTED] and IA-[REDACTED] were analyzed at a dilution to bring the concentration of target analytes within the calibrated range; the reported compound quantitation limits were adjusted upwards accordingly. No other dilution, re-extraction, or reanalysis was performed on the samples associated with this SDG.

OTHER QUALITY CONTROL DATA OUT OF SPECIFICATION

None.

FIELD DUPLICATE

Field duplicates are two (or more) field samples collected at the same time in the same location. Each of the samples represents the same population and is carried through all steps of the sampling and analytical procedures in an identical manner. Field duplicate results are used to assess precision of the total method, including sampling, analysis, and site heterogeneity.

No field duplicates were submitted in association with this SDG.

SYSTEM PERFORMANCE AND OVERALL ASSESSMENT

Clean canisters were used to transport air samples in this SDG. All criteria were met to ensure containers were appropriate for sample storage.

Overall, the laboratory data generated met the project goals and quality control criteria, with the exceptions identified in this report and as summarized in Table 1.

Table 1
Review Elements Summary

	Were acceptance criteria met?		
	Yes	No	
Volatiles		Major	Minor
Holding Time	X		
Method Blanks	X		
Storage Blanks	NA		
Trip Blanks	NA		
Field Blanks	NA		
Mass Spectrometer Tuning	X		
Calibration Response Factor	X		
Calibration Percent Relative Standard Deviation and Percent Difference			X
Internal Standards	X		
Compound Identification - Volatile	X		
Tentatively Identified Compounds - Volatile	NA		
Laboratory Control Sample			X
Reporting	X		
Other Quality Control Data out of Specification	X		
Field Duplicate	NA		

Major= Major data quality issue identified resulting in rejection of data.

Minor= Minor data quality issue identified resulting in the qualification of data. Data qualification should be used to inform the data users of data limitations.

NA = Not applicable

Table 2
Data Validation Qualifiers

Data Qualifier	Definition
U	The analyte was analyzed for but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analysis indicates the presence of an analyte that has been “tentatively identified” and the associated numerical value represents its approximate concentration.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.