ecology and environment engineering and geology, p.c. Environmental Specialists

BUFFALO CORPORATE CENTER

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February 28, 2020

Mr. Payson Long, Project Manager New York State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, 12th Floor Albany, New York 12233 - 7013

Re: Mr. C's Dry Cleaners Site, Contract # D007617, Site # 915157 January 2020 Operations, Maintenance, and Monitoring Report

Dear Mr. Long:

Ecology and Environment Engineering and Geology, P.C. (E&E) is pleased to provide the January 2020 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 915157, located in the Village of East Aurora, New York.

During the January 2020 reporting period, the treatment system was in operation from January 3, 2020 to February 7, 2020. The January monthly OM&M sampling was performed on February 6, 2020, and the results were received from SAI on February 19, 2020 (See <u>Attachment A</u>). A summary of field activities prepared by E&E's subcontractor, IYER Environmental Group, PLLC. (IEG), is provided in <u>Attachment B</u>. The current annual site utility cost information is provided in <u>Attachment C</u>.

In review of the on-site treatment system operations, monitoring and maintenance from IEG for January 2020, E&E offers the following comments and highlights:

Operational Summary:

- Based on inspection reports prepared by IEG, the remedial treatment system for the period of January 3, 2020 through February 7, 2020, had an approximate operational up-time of 77%, and 92,500 gallons of contaminated groundwater were treated during the reporting period. The treated effluent volumes and operational up-time can be seen in Table 1.
- IEG cleaned the Air Stripper with muriatic acid on January 29, 2020 following the non-compliant effluent results from the December 2019 sampling. Following restart of the system compliance samples were collected on February 6, 2020. Effluent results from this sampling met all requirements of the SPDES Equivalency permit. The effluent results are provided in Table 2.
- The analytical summary results of the February 6, 2020 samples revealed the total volatile organic contaminant concentrations of the influent to be 3,444.0 µg/L and the concentration of total volatile organic contaminants in the effluent was 5.0 µg/L. The summary of influent and effluent contaminant concentrations for the January 2020

sampling are presented in <u>Table 3</u>. <u>Figure 1</u> shows the influent and effluent VOC concentrations during each sampling event in 2018, 2019, and 2020.

• The Mr. C's treatment system, based on the total flows from the uptime operations, removed 2.66 lbs. of targeted contaminants from the groundwater between January 3, 2020 to February 7, 2020. The cleanup effectiveness for January 2020 was approximately 99.85%. The calculations and data for the month are presented in Table 3. The mass of VOCs removed each month throughout 2018, 2019 and 2020 is shown in Figure 2.

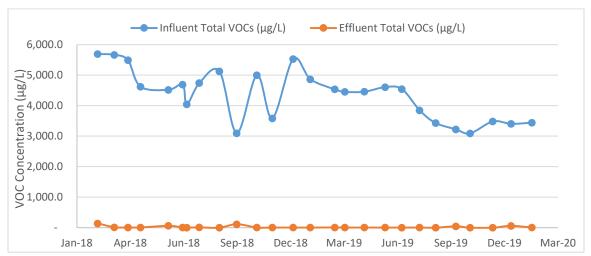


Figure 1: Monthly Influent and Effluent VOC concentrations - 2018 - 2020.

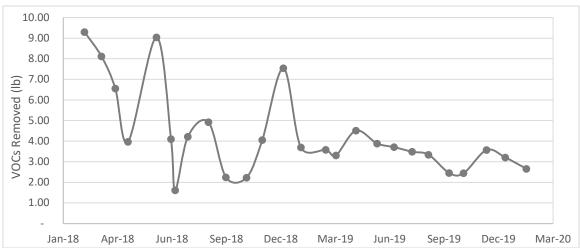


Figure 2: Mass of VOCs removed each month - 2018 - 2020.

Pumping Well Summary:

• Pumping wells PW-4, PW-5, PW-6, PW-7, and PW-8 were sampled on February 6, 2020. Results of the pumping well sampling event are provided in <u>Table 4</u> and an excerpt from the analytical data package is provided in Attachment A. Figures 3

<u>through 7</u> show the historical concentrations of cis-1,2-dichloroethene (cis-1,2-DCE), tetrachloroethene (PCE), and trichloroethene (TCE) throughout 2017 to 2020.

• Individual pumping well sampling will continue to be completed on a quarterly basis to monitor VOC concentrations.

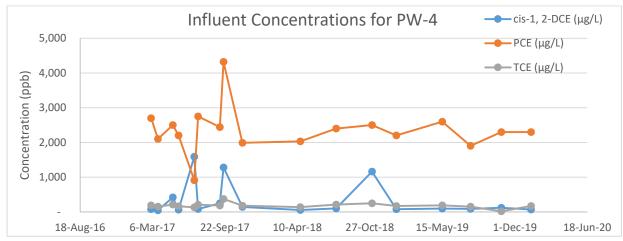


Figure 3: Influent concentrations of cis-1,2-DCE, PCE, and TCE - Pumping Well 4 (PW-4).

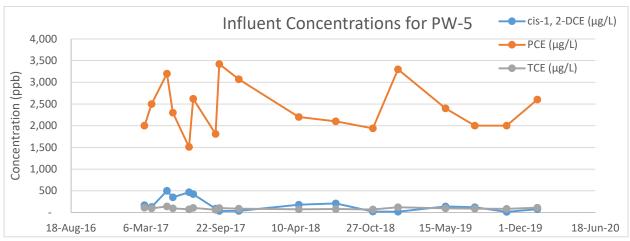


Figure 4: Influent concentrations of cis-1, 2-DCE, PCE, and TCE - Pumping Well 5 (PW-5).

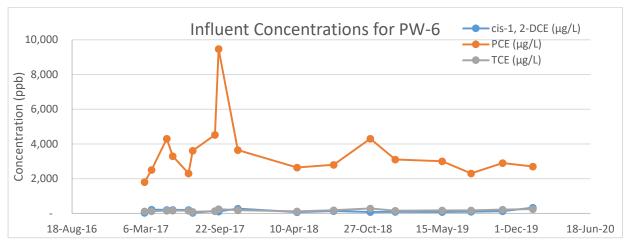


Figure 5: Influent concentrations of cis-1, 2-DCE, PCE, and TCE - Pumping Well 6 (PW-6).

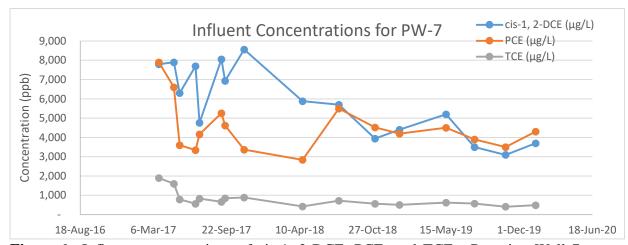


Figure 6: Influent concentrations of cis-1, 2-DCE, PCE, and TCE - Pumping Well 7 (PW-7).

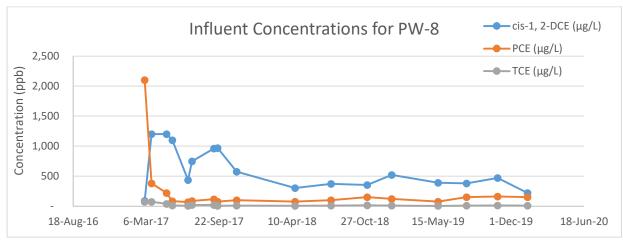


Figure 7: Influent concentrations of cis-1, 2-DCE, PCE, and TCE - Pumping Well 8 (PW-8).

Mr. Payson Long, Project Manager February 28, 2020 Page 5 of 5

If you have questions regarding the January 2020 OM&M report summary, please do not hesitate to contact me at 716-684-8060 or asmith@ene.com.

Very Truly Yours,

Ecology and Environment Engineering and Geology, P. C.

Ashlee Smith, P.E. Project Manager

cc: D. Szymanski, Region 9, NYSDEC – Buffalo w/ attachments

Table 1 Mr. C's Dry Cleaners Site Remediation Site #915157 System Operation and Management

		Up-time (Repo				VOC Removal	
Month	Sample Date	Reporting Hours	Operational Up-time	Treated Effluent (gallon)	Influent VOCs (μg/L)	Effluent VOCs(μg/L)	VOCs Removed (lbs.)
(Treatment System Up-time from 9/5/02 to 01/03/20)		147,266.00	91.54%	134,339,311	NA	NA	1,794.68
January 03, 2020 to February 07, 2020	February 7, 2020	672	77.14%	92,500	3444.00	5.00	2.66
Total in 2020		672.00	77.14%	92,500	3,444.00	5.00	2.66
Total from startup		147,938.00	91.46%	134,431,811	NA	NA	1,797.34

NOTES:

- 1. Up-time based as percentage of total reporting hours.
- 2. Treatment system operated by Iyer Environmental Group from 07/07/2016 to present.
- 3. VOC removal calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
- 4. VOC removal calculations assume that non-detect values = 0 ug/L.
- 5. Total VOCs summations include estimated "J" values.
- 6. VOC removal calculations are based on effluent totalizer readings.
- 7. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
- 8. Unit conversion: 1 pound = 453.5924 grams, 1 gallon = 3.785 liters
- 9. Formula for the VOC removal calculation:

 $(VOCs_{\textit{Influent}} - VOCs_{\textit{Effluent}})(ug/L) \cdot (1g/10^6 ug) \cdot (1 \textit{lb/453.5924 g}) \cdot (Monthly \textit{process water})(gal) \cdot (3.785 \textit{L/gallon}) \cdot (3.785 \textit$

Table 2 Mr. C's Dry Cleaners Site Remediation Site #915157

Effluent Discharge Criteria & Analytical Compliance Results

Parameter/Analyte	Daily Maximum ¹	Units	February67, 2020 Effluent Analytical Values Compliance
Flow (Average) ²	N/A	gpd	
pH	6.0 - 9.0	standard units	8.38
1,1 Dichloroethene	10	μg/L	ND(<1.0)
cis-1,2-dichloroethene	10	μg/L	ND(<1.0)
Trichloroethene	10	μg/L	ND(<1.0)
Tetrachloroethene	10	μg/L	ND(<1.0)
Vinyl Chloride	10	μg/L	ND(<1.0)
Benzene	5	μg/L	ND(<1.0)
Ethylbenzene	5	μg/L	ND(<1.0)
Methylene Chloride	10	μg/L	ND(<1.0)
1,1,1 Trichloroethane	10	μg/L	ND(<1.0)
Toluene	5	μg/L	ND(<1.0)
Methyl-t-Butyl Ether (MTBE)	NA	ug/L	ND(<1.0)
o-Xylene ³	5	μg/L	ND(<1.0)
m, p-Xylene ³	10	μg/L	ND(<1.0)
Total Xylenes	NA	ug/L	ND(<1.0)
Iron, total ⁴	600	μg/L	NA ⁴
Aluminum ⁴	4,000	μg/L	NA ⁴
Copper ⁴	48	μg/L	NA ⁴
Lead ⁴	11	μg/L	NA ⁴
Manganese ⁴	2,000	μg/L	NA ⁴
Silver ⁴	100	μg/L	NA ⁴
Vanadium ⁴	28	μg/L	NA ⁴
Zinc ⁴	230	μg/L	NA ⁴
Total Dissolved Solids ⁴	850	mg/L	NA ⁴
Total Suspended Solids ⁴	20	mg/L	NA ⁴
Hardness	N/A		468
Cyanide, Free ⁴	10	μg/L	NA ⁴

NOTES:

- 1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000
- 2. Average flows based on effluent readings:

January 3 - February 7, 2020 = 2,643 gallons per day

- 3. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
- 4. Removed from the required analysis list by NYSDEC Region 9 in February 2005.
- 5. Dark shaded cells indicate that analytical value exceeds the "Daily Maximum."
- 6. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
- 7. "NA" indicates that analyses were not performed and data is unavailable.
- 8. "J" indicates an estimated value below the detection limit.
- 9. "B" indicates analyte found in the associated blank.
- 10. "NS" indicates that the parameter analysis was not sampled.

Table 3 Mr. C's Dry Cleaners Site Remediation NYSDEC Site #915157 January 2020 VOC Analytical Summary

			on the Febru uent Analytic	• ,	0
Compound	Influ Concen		Efflu Concent		Cleanup Efficiency*
	(ug	-	(ug/	L)	(%)
Acetone	ND(<40)	U	5		
Benzene	ND(<2)	U	ND(<1.0)	U	NA
2-Butanone	ND(<20)	U	ND(<10)	U	100.00%
1,1-Dichloroethene	2	J	ND(<1.0)	U	100.00%
cis-1, 2-Dichloroethene	1400		ND(<1.0)	U	100.00%
Chloroform	ND(<2)	U	ND(<1.0)	U	NA
Chloromethane	ND(<2)	U	ND(<1.0)	U	NA
Methylene chloride	ND(<2)	U	ND(<1.0)	U	NA
Methyl tert-butyl ether (MTBE)	6.0		ND(<1.0)	U	100.00%
Methyl acetate	ND(<50)	U	ND(<5.0)	U	NA
Tetrachloroethene (PCE)	1700		ND(<1.0)	U	100.00%
Toluene	ND(<2)	U	ND(<1.0)	U	NA
Trichloroethene (TCE)	230		ND(<1.0)	U	100.00%
Carbon Disulfide	ND(<10)	U	ND(<5.0)	U	NA
1,1,2 Trichloro-1,2,2-trifluororethane	ND(<2)	U	ND(<1.0)	U	NA
2-Hexanone	ND(<200)	U	ND(<10)	U	NA
4-Methyl-2-pentanone	ND(<200)	U	ND(<10)	U	NA
Cyclohexane	ND(<10)	U	ND(<1.0)	U	NA
trans-1,2-dichloroethene	12		ND(<1.0)	U	100.00%
Chlorobenzene	ND(<2)	U	ND(<1.0)	U	NA
Methylcyclohexane	ND(<10)	U	ND(<1.0)	U	NA
Ethylbenzene	ND(<2)	U	ND(<1.0)	U	NA
Vinyl Chloride	94		ND(<1.0)	U	100.00%
Total Xylenes	ND(<2)	U	ND(<2.0)	U	NA
TOTAL:	3444.0		5.0		99.85%

Notes:

- 1. The efficiency cleanup values are calculated based on the February 6, 2020 results
- 2. "NA" = Not applicable
- 3. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
- 4. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
- 5. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
- 6. "S" indicates an estimated value and suspected lab contamination.
- 7. "Bold" exceeds the SPDES Equilavency Permit Requirements.

^{*} Contaminants of Concern only

Attachment A

Excerpts from the Groundwater Treatment System Analytical Report and Influent Pumping Well Report from

Spectrum Analytical Laboratories

Analytical Data Package Work Order ID: SC57444 Sampled by IEG: February 6, 2020 Report Received: February 19, 2020

Analytical Data Package Work Order ID: SC57271 Sampled by IEG: January 15, 2020

Report Received: January 27, 2020



V	Final Report
	Revised Report

Report Date: 19-Feb-20 11:34

Laboratory Report SC57444

Ecology and Environment, Inc. 368 Pleasant View Drive Lancaster, NY 14086 Attn: Jose Ramirez Hernandez

Project: Mr. C's - East Aurora, NY

Project #: [none]

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

New York # 11393 USDA # P330-15-00375

Authorized by:

Agnes Huntley Project Manager

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Eurofins Environment Testing New Englandl holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 22 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Environment Testing New England.

Eurofins Environment Testing New England is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Environment Testing New England is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.eurofinsus.com/Spectrum for a full listing of our current certifications and fields of accreditation.

Please contact the Laboratory or Technical Director at 413-789-9018 with any questions regarding the data contained in this laboratory report.

Sample Summary

Work Order: SC57444

Project: Mr. C's - East Aurora, NY

Project Number: [none]

Laboratory ID	Client Sample ID	<u>Matrix</u>	Date Sampled	Date Received
SC57444-01	Influent	Ground Water	06-Feb-20 12:30	07-Feb-20 09:30
SC57444-02	Effluent	Ground Water	06-Feb-20 12:30	07-Feb-20 09:30
SC57444-03	TB HCL	Trip Blank	06-Feb-20 12:30	07-Feb-20 09:30

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CASE NARRATIVE:

Data has been reported to the RDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the detection limit are reported as "<" (less than) the detection limit in this report.

The samples were received 2.4 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

<u>Sample</u>	Sample Collection	ELLE#
SC57444-01	02/06/2020 12:30	1256130
SC57444-02	02/06/2020 12:30	1256131
SC57444-03	02/06/2020 12:30	1256132

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of holdtime.

SW-846 8260C, GC/MS Volatiles

Sample #s: 1256130, 1256131, 1256132

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

The affected analyte(s) and response(s) are:

Analyte Response (%Drift)

trans-1,4-dichloro-2-butene -41 hexachlorobutadiene -22

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW-846 8260C

Samples:

SC57444-01 Influent

Estimated value

1,1-Dichloroethene

Exceeded calibration range of the instrument

cis-1,2-Dichloroethene Tetrachloroethene

SC57444-01RE01 Influent

Estimated value

Methyl Tertiary Butyl Ether

SC57444-02 Effluent

Estimated value

Acetone

SW-846 8260C

Samples:

SC57444-03 TB HCL

Estimated value

Acetone

This laboratory report is not valid without an authorized signature on the cover page.

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Summary of Hits

Lab ID: SC57444-01 Client ID: Influent

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Calcium	148		0.200	mg/l	EPA 200.7
Magnesium	23.7		0.100	mg/l	EPA 200.7
Total Hardness as CaCO3	467		0.20	mg/l	SM 2340 B
pН	7.42		1.00	pH Units	SM4500-H B-11
1,1-Dichloroethene	2	J.	2	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	1400	E.	2	ug/l	SW-846 8260C
Methyl Tertiary Butyl Ether	6		2	ug/l	SW-846 8260C
Tetrachloroethene	1700	E.	2	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	12		2	ug/l	SW-846 8260C
Trichloroethene	230		2	ug/l	SW-846 8260C
Vinyl Chloride	94		2	ug/l	SW-846 8260C
Lab ID: SC57444-01RE01			Client ID: Influent		
Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	1200		20	ug/l	SW-846 8260C
Methyl Tertiary Butyl Ether	6	J.	20	ug/l	SW-846 8260C
Tetrachloroethene	1700		20	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	100		20	ug/l	SW-846 8260C
Trichloroethene	220		20	ug/l	SW-846 8260C
Vinyl Chloride	75		20	ug/l	SW-846 8260C
Lab ID: SC57444-02			Client ID: Effluent		
Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Calcium	148		0.200	mg/l	EPA 200.7
Magnesium	23.8		0.100	mg/l	EPA 200.7
Total Hardness as CaCO3	468		0.20	mg/l	SM 2340 B
pH	8.38		1.00	pH Units	SM4500-H B-11
Acetone	5	J.	20	ug/l	SW-846 8260C
Lab ID: SC57444-03			Client ID: TB HCL		
Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Acetone	2	J.	20	ug/l	SW-846 8260C

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

Sample Id Influent SC57444	dentification			Client F	Project # one]	•	<u>Matrix</u> Ground W		ection Date 5-Feb-20 12			eceived Feb-20	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontra	acted Analyses												
	acted Analyses												
Analysis p	erformed by Eurofins Lancast	er Laborator	ies Environme	ntal - 1067	0								
7440-70-2	Calcium	148		mg/l	0.200	0.0960	1	EPA 200.7	10-Feb-20 14:55	11-Feb-20 07:31	10670	0410571	6
7439-95-4	Magnesium	23.7		mg/l	0.100	0.0400	1	"	"	"	"	"	
	by method General Prepa												
	erformed by Eurofins Lancast		ies Environme										
471-34-1	Total Hardness as CaCO3	467		mg/l	0.20	0.096	1	SM 2340 B	12-Feb-20 08:55	12-Feb-20 08:55	10670	0430625	6
	acted Analyses by method SW-846 50300	<u>}</u>											
Analysis p	erformed by Eurofins Lancast	er Laborator	ies Environme	ntal - 1067	0								
630-20-6	1,1,1,2-Tetrachloroethane	< 2		ug/l	2	0.4	2	SW-846 8260C	18-Feb-20 12:14	18-Feb-20 12:15	10670	.200491A	J
71-55-6	1,1,1-Trichloroethane	< 2		ug/l	2	0.6	2	"	u	"	"	"	
79-34-5	1,1,2,2-Tetrachloroethane	< 2		ug/l	2	0.4	2	n n	u u	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 2		ug/l	2	0.4	2	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	2	J.	ug/l	2	0.4	2	"	"	"	"	"	
563-58-6	1,1-Dichloropropene	< 10		ug/l	10	0.4	2	"	"	"	"	"	
87-61-6	1,2,3-Trichlorobenzene	< 10		ug/l	10	0.8	2	"	"	"	"	"	
96-18-4	1,2,3-Trichloropropane	< 10		ug/l	10	0.4	2	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 10		ug/l	10	0.6	2	"	"	"	"	"	
95-63-6	1,2,4-Trimethylbenzene	< 10		ug/l	10	2	2	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloroprop ane	< 10		ug/l	10	0.6	2	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 2		ug/l	2	0.4	2	"	u	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 2		ug/l	2	0.6	2	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 2		ug/l	2	0.4	2	"	"	"	"	"	
108-70-3	1,3,5-Trichlorobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	
108-67-8	1,3,5-Trimethylbenzene	< 10		ug/l	10	0.6	2	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 10		ug/l	10	0.4	2	"	u u	"	"	"	
142-28-9	1,3-Dichloropropane	< 2		ug/l	2	0.4	2	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	
123-91-1	1,4-Dioxane	< 500		ug/l	500	58	2	"	"	"	"	"	
594-20-7	2,2-Dichloropropane	< 2		ug/l	2	0.6	2	"	"	"	"	"	
78-93-3	2-Butanone	< 20		ug/l	20	0.6	2	"	"	"	"	"	
95-49-8	2-Chlorotoluene	< 10		ug/l	10	0.4	2	"	"	"	"	"	
591-78-6	2-Hexanone	< 20		ug/l	20	0.6	2	"	"	"	"	"	
106-43-4	4-Chlorotoluene	< 10		ug/l	10	0.4	2	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 20		ug/l	20	1	2	"	"	"	"	"	
67-64-1	Acetone	< 40		ug/l	40	1	2	"	"	"	"	"	
107-13-1	Acrylonitrile	< 40		ug/l	40	0.6	2	"	"	"	"	"	
71-43-2	Benzene	< 2		ug/l	2	0.4	2	II .	"	"	"	"	
108-86-1	Bromobenzene	< 10		ug/l	10	0.4	2	"	"	"	"	"	
74-97-5	Bromochloromethane	< 10		ug/l	10	0.4	2	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 2		ug/l	2	0.4	2	"	"	"	"	u	

Sample Identification

Influent	Sample Identification Influent SC57444-01			Client Project # [none]		<u> </u>		lection Date/Time 6-Feb-20 12:30		Received 07-Feb-20			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analysi	Batch	Cert.
Subcontra	cted Analyses												
Analysis pe	erformed by Eurofins Lancas	ster Laborato	ries Environn	ental - 10670)								
Re-analys	sis of Subcontracted Anal	<u>yses</u>											
17060-07-0	1,2-Dichloroethane-d4	102			80-12	0 %		SW-846 8260C	18-Feb-20 12:36	-Feb-20 12:	10670	.200491A	,
460-00-4	4-Bromofluorobenzene	95			80-12	0 %		"	"	"	"	"	
1868-53-7	Dibromofluoromethane	100			80-12	0 %		"	"	"	"	"	
2037-26-5	Toluene-d8	98			80-12	0 %		"	"	"	"		
	cted Analyses by method SM4500-H B-	<u>11</u>											
Analysis pe	erformed by Phoenix Enviro	nmental Labs,	Inc. * - CT0	07									
	pH	7.42	pН	pH Units	1.00	1.00	1	SM4500-H B-11	07-Feb-20 21:37	07-Feb-20 21:37	11301	517861A	

19-Feb-20 11:34 Page 11 of 22

Effluent	Sample Identification Effluent SC57444-02			Client P			<u>Matrix</u> Ground W	· · · · · · · · · · · · · · · · · · ·	ection Date 5-Feb-20 12			Received 07-Feb-20		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analysi	Batch	Cert.	
Subcontra	acted Analyses													
Subcontra	acted Analyses													
Analysis p	erformed by Eurofins Lancasi	ter Laboratori	es Environme	ntal - 10670)									
7440-70-2	Calcium	148		mg/l	0.200	0.0960	1	EPA 200.7	10-Feb-20 14:55	11-Feb-20 07:28	10670	04105716	3	
7439-95-4 Prepared	Magnesium by method General Prepa	23.8 ration		mg/l	0.100	0.0400	1	n	"	"	"	"		
	erformed by Eurofins Lancasi		es Environme	ntal - 10670	,									
471-34-1	Total Hardness as CaCO3	468		mg/l	0.20	0.096	1	SM 2340 B	12-Feb-20 08:55	12-Feb-20 08:55	10670	04306256	3	
	acted Analyses	_												
	by method SW-846 50300		on Emiliaria	ntal 10670	1									
	erformed by Eurofins Lancasi		es Environme			0.0	4	C/M 046 00000	10 505 00	10 504 00	10670	200404 *		
630-20-6	1,1,1,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	SW-846 8260C	18-Feb-20 11:52	18-Feb-20 11:53	10670	.200491A	•	
71-55-6	1,1,1-Trichloroethane	< 1		ug/l	1	0.3	1	"	"	"	"	"		
79-34-5	1,1,2,2-Tetrachloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"		
79-00-5	1,1,2-Trichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"		
75-34-3	1,1-Dichloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"		
75-35-4	1,1-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"	"		
563-58-6	1,1-Dichloropropene	< 5		ug/l	5	0.2	1	"	"	"	"	"		
87-61-6	1,2,3-Trichlorobenzene	< 5		ug/l	5	0.4	1	"	"	"	"	"		
96-18-4	1,2,3-Trichloropropane	< 5		ug/l	5	0.2	1	"	"		"			
120-82-1	1,2,4-Trichlorobenzene	< 5		ug/l	5	0.3	1	"	"	"	"	"		
95-63-6	1,2,4-Trimethylbenzene	< 5		ug/l	5	1	1	"	"	"	"			
96-12-8	1,2-Dibromo-3-chloroprop	< 5		ug/l	5	0.3	1	n	"	"	n	"		
106-93-4	1,2-Dibromoethane	< 1		ug/l	1	0.2	1	"	"		"			
95-50-1	1,2-Dichlorobenzene	< 5		ug/l	5	0.2	1	"			"			
107-06-2	1,2-Dichloroethane	< 1		ug/l	1	0.3	1	"	"		"			
78-87-5	1,2-Dichloropropane	< 1		ug/l	1	0.2	1	"	"	"	"	"		
108-70-3	1,3,5-Trichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"			
108-67-8	1,3,5-Trimethylbenzene	< 5		ug/l	5	0.3	1				"			
541-73-1	1,3-Dichlorobenzene	< 5		ug/l	5	0.2	1		"		"			
142-28-9	1,3-Dichloropropane	< 1		ug/l	1	0.2	1		"		"	"		
106-46-7	1,4-Dichlorobenzene	< 5		ug/l	5	0.2	1	"	"	"	"			
123-91-1	1,4-Dioxane	< 250			250	29	1	"			"			
594-20-7				ug/l				,,						
78-93-3	2,2-Dichloropropane	< 1 < 10		ug/l	1	0.3	1	"	"		"	"		
	2-Butanone			ug/l	10	0.3	1	"	"					
95-49-8	2-Chlorotoluene	< 5		ug/l	5	0.2	1				"			
591-78-6	2-Hexanone	< 10		ug/l	10	0.3	1	"						
106-43-4	4-Chlorotoluene	< 5		ug/l	5	0.2	1							
108-10-1	4-Methyl-2-pentanone	< 10		ug/l	10	0.5	1							
67-64-1	Acetone	5	J.	ug/l	20	0.7	1							
107-13-1	Acrylonitrile	< 20		ug/l	20	0.3	1							
71-43-2	Benzene	< 1		ug/l	1	0.2	1	"	"	"	"	"		
108-86-1	Bromobenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"		
74-97-5	Bromochloromethane	< 5		ug/l	5	0.2	1	"		"	"			
75-27-4	Bromodichloromethane	< 1		ug/l	1	0.2	1	"	"	"				

Effluent	ample Identification Offluent C57444-02			Client F	Project # one]		<u>Matrix</u> Ground W		ection Date 5-Feb-20 12		Received 07-Feb-20		
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontra	acted Analyses												
Subcontra	acted Analyses												
	erformed by Eurofins Lancast	er Laboratorie	es Environme	ental - 1067	0								
75-25-2	Bromoform	< 4		ug/l	4	1	1	SW-846 8260C	18-Feb-20 11:52	18-Feb-20 11:53	10670	.200491A	ı
74-83-9	Bromomethane	< 1		ug/l	1	0.3	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 5		ug/l	5	0.2	1	"	"	"	"	"	
56-23-5	Carbon Tetrachloride	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
67-66-3	Chloroform	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	"	"	"	"		
10061-01-5	cis-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
74-95-3	Dibromomethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1		ug/l	1	0.2	1	"	"	"	"	"	
64-17-5	Ethanol	< 750		ug/l	750	280	1	"	"	"	"		
60-29-7	Ethyl ether	< 5		ug/l	5	0.2	1	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 1		ug/l	1	0.2	1	"	"	"	"		
100-41-4	Ethylbenzene	< 1		ug/l	1	0.4	1	"	"	"	"		
76-13-1	Freon 113	< 10		ug/l	10	0.2	1	"	"	"	"		
87-68-3	Hexachlorobutadiene	< 5		ug/l	5	2	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"		
179601-23-1	1 m+p-Xylene	< 5		ug/l	5	1	1	"	"	"	"		
1634-04-4	Methyl Tertiary Butyl Ether	< 1		ug/l	1	0.2	1	"	"	"	"	"	
75-09-2	Methylene Chloride	< 1		ug/l	1	0.3	1	"	"	"	"	"	
104-51-8	n-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
103-65-1	n-Propylbenzene	< 5		ug/l	5	0.2	1	"	"	"		"	
91-20-3	Naphthalene	< 5		ug/l	5	1	1	"	"	"	"	"	
95-47-6	o-Xylene	< 1		ug/l	1	0.4	1	"	"	"	"	"	
99-87-6	p-Isopropyltoluene	< 5		ug/l	5	0.2	1	"	"		"	"	
135-98-8	sec-Butylbenzene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
100-42-5	Styrene	< 5		ug/l	5	0.2	1	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 5		ug/l	5	0.8	1	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 50		ug/l	50	12	1	ıı .	"	"	"	"	
98-06-6	tert-Butylbenzene	< 5		ug/l	5	0.3	1	"	"	"		"	
127-18-4	Tetrachloroethene	< 1		ug/l	1	0.2	1	ıı	"	"	"	"	
109-99-9	Tetrahydrofuran	< 10		ug/l	10	0.7	1	II .	"	"	"	"	
108-88-3	Toluene	< 1		ug/l	1	0.2	1	II .	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1		ug/l	1	0.2	1	ıı .	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 1		ug/l	1	0.2	1	ıı .	"	"	"	"	
110-57-6	trans-1,4-Dichloro-2-buten	< 50		ug/l	50	6	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1		ug/l	1	0.2	1		"	"		"	
75-69-4	Trichlorofluoromethane	< 1		ug/l	1	0.2	1	"	"	"			
75-03-4	Vinyl Chloride	< 1		ug/l	1	0.2	1		"	"	"	"	

Sample Identification Effluent SC57444-02			Client Project # [none]			Matrix Ground Water		llection Date/Time 06-Feb-20 12:30		Received 07-Feb-20			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontra	cted Analyses												
Subcontra	icted Analyses												
Analysis pe	erformed by Eurofins Lanca	ster Laborator	ies Environm	ental - 10670)								
Surrogate r	recoveries:												
17060-07-0	1,2-Dichloroethane-d4	102			80-12	20 %		SW-846 8260C	18-Feb-20 11:52	-Feb-20 11:	10670	.200491A	,
460-00-4	4-Bromofluorobenzene	95			80-12	20 %		"	"	"	"		
1868-53-7	Dibromofluoromethane	100			80-12	20 %		u u	"	"	"	"	
2037-26-5	Toluene-d8	98			80-12	20 %		n .	"	"	"	"	
	cted Analyses by method SM4500-H B-	<u>11</u>											
Analysis pe	erformed by Phoenix Enviro	nmental Labs,	Inc. * - CT00	7									
	рН	8.38	рН	pH Units	1.00	1.00	1	SM4500-H B-11	07-Feb-20 21:37	07-Feb-20 21:37	11301	517861A	

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Notes and Definitions

E. Exceeded calibration range of the instrument

J. Estimated value

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

pH The method for pH does not stipulate a specific holding time other than to state that the samples should be analyzed as soon as possible. For aqueous samples the 40 CFR 136 specifies a holding time of 15 minutes from sampling to analysis. Therefore all aqueous pH samples not analyzed in the field are considered out of hold time at the time of sample receipt.

All soil samples are analyzed as soon as possible after sample receipt.

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

<u>Matrix Spike</u>: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

<u>Method Blank</u>: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

<u>Method Detection Limit (MDL)</u>: The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

<u>Surrogate</u>: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

<u>Continuing Calibration Verification:</u> The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

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> (5) 444

Special Handling:

🔀 Standard TAT - 7 to 10 business days

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CHAIN OF CUSTODY RECORD

eurofins :

Spectrum Analytical

All TATs subject to laboratory approval
Min. 24-hr notification needed for rushes
Complex disposed after 30 days unless other

anning charges may apply	4 2		¥
QA/QC Reporting Notes:	List Preservative Code below:	4=HNO ₃ 5=NaOH 6=Ascorbic Acid 11= 12=	F=Field Filtered 1=Na ₂ S2O ₃ 2=HCl 3=H ₂ SO ₄ 4=HNO ₃ 5=NaOH 6=Ascorbic Acid 7=CH3OH 8=NaHSO ₄ 9=Deionized Water 10=H ₃ PO ₄ 11= 12= 12=
, , , , , , , , , , , , , , , , , , ,	R. Allen	P.O.No.: Quote #:	Project Mgr. Tose Hernandez
	Sampler(s):		Telephone #: (716) 684-8060
ora State: NY	Location: East Avrora		
	Site Name: Mr CS OM & M		Lancaster NY 14086
	Project No:	Invoice To: ESE INC	1
Samples disposed after 50 days unless otherwise instructed.	Samples dispose		

Techsol Sevent investory Techsol Sevent in the period of	Condition upon receipt: Custody Seals:
A Received by: Received by: Received by: A SANISO, 9-Denonzed Water 10-H ₃ PO ₄ 11= 12- Containers Containe	E-mail to:
A INSTAURANT CHAPTON III III III III III III III III III I	EDD format:
OH 8-NaHSO ₄ 9-Deconized water 10=H ₂ PO ₄ 11= 12= No-Soil SI_Sludge A=Indoor/Ambient Air SG=Soil Gas N1=	7
OH 8=NaHSO ₄ 9-Deionized Water 10=H ₂ PO ₄ 111= 12= Trinking Water GW-Groundwater 'SW-Surface Water WW=Waste Water SO-Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas N1=	
OH 8=NaHSO ₂ 9=Deionized Water 10=H ₂ PO ₄ 111= 12= OH 8=NaHSO ₄ 9=Deionized Water 10=H ₂ PO ₄ 111= 12= SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas NI=	
or Handle of Politics water 10=H3PO4 11= 12= 12= 12	<
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OH 8=NaHSO ₄ 9=Deionized Water 10=H ₈ PO ₄ 11= 12= Trinking Water GW=Groundwater 'SW=Surface Water WW=Waste Water Water Water SG=Soil Gas SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas X2= X3= Containers G=Grab Carbon Grab Containers Type Matrix # of Clear Glass # of Plastic # of Plastic # of Plastic	2
OH 8=NaHSO ₄ 9=Deionized Water 10=H ₃ PO ₄ 11= 12= Containers Frinking Water GW=Groundwater 'SW=Surface Water WW=Waste Water W=Waste W=Waste Water W=Waste Water W=Waste Water W=Waste Water W=Waste	1-1
OH 8=NaHSO ₄ 9=Deionized Water 10=H ₃ PO ₄ 11= 12= **Trinking Water GW=Groundwater 'SW=Surface Water WW=Waste Water Water Water SG=Soil Gas **SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas **X3=** **X3=** **X3=** **X3=** **X4=** **X4=** **X5=** **X5=** **X6=** **Containers **Containers **X6=** **	VC
OH 8=NaHSO ₄ 9=Deionized Water 10=H ₃ PO ₄ 11= 12= Containers Frinking Water GW=Groundwater SW=Surface Water WW=Waste Water Containers SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas	dnes OC
iace Water	5
11 = 12 =	Analysis
1]=	4 2
	List Preservative Code below:

Ambient Liced

☐ Refrigerated ☐ DI VOA Frozen

☐ Soil Jar Frozen



V	Final Report
	Revised Report

Report Date: 27-Jan-20 13:22

Laboratory Report SC57271

Ecology and Environment, Inc. 368 Pleasant View Drive Lancaster, NY 14086 Attn: Jose Ramirez Hernandez

Project: Mr. C's - East Aurora, NY

Project #: [none]

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.

All applicable NELAC requirements have been met.

New York # 11393 USDA # P330-15-00375

Authorized by:

Dawn Wojcik Laboratory Director

Jawn & Woscik

Eurofins Environment Testing New Englandl holds primary NELAC certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.

Please note that this report contains 31 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Eurofins Environment Testing New England.

Eurofins Environment Testing New England is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Environment Testing New England is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.eurofinsus.com/Spectrum for a full listing of our current certifications and fields of accreditation.

Please contact the Laboratory or Technical Director at 413-789-9018 with any questions regarding the data contained in this laboratory report.

Sample Summary

Work Order: SC57271

Project: Mr. C's - East Aurora, NY

Project Number: [none]

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC57271-01	PW-4	Ground Water	15-Jan-20 00:00	16-Jan-20 09:20
SC57271-02	PW-5	Ground Water	15-Jan-20 00:00	16-Jan-20 09:20
SC57271-03	PW-6	Ground Water	15-Jan-20 00:00	16-Jan-20 09:20
SC57271-04	PW-7	Ground Water	15-Jan-20 00:00	16-Jan-20 09:20
SC57271-05	PW-8	Ground Water	15-Jan-20 00:00	16-Jan-20 09:20

CASE NARRATIVE:

Data has been reported to the RDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

All non-detects and all results below the detection limit are reported as "<" (less than) the detection limit in this report.

The samples were received 3.1 degrees Celsius, please refer to the Chain of Custody for details specific to temperature upon receipt. An infrared thermometer with a tolerance of +/- 1.0 degrees Celsius was used immediately upon receipt of the samples.

If a Matrix Spike (MS), Matrix Spike Duplicate (MSD) or Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group. If method or program required MS/MSD/Dup were not performed, sufficient sample was not provided to the laboratory.

SW-846 8260C, GC/MS Volatiles

Sample #s: 1241393

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The reported concentration in the associated sample(s) is considered to be estimated. Therefore the result for the following analyte(s) is estimated: Vinyl Chloride.

Sample #s: 1241390, 1241391, 1241392

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

The affected analyte(s) and response(s) are:

Analyte Response (%Drift)
Dichlorodifluoromethane -38
Chloromethane -30
Bromomethane -33
Chloroethane -29
Trichlorofluoromethane -35

The referenced method allows a maximum of 20% of the analytes in the calibration to exceed the 20% Drift continuing calibration verification criteria. The reported concentration in the associated sample(s) is considered to be estimated. Therefore the result for the following analyte(s) is estimated:

The affected analyte(s) and response(s) are:

Analyte

Response (%Drift)

Vinyl Chloride -30

Sample #s: 1241389

A Report Limit Verification (RLV) standard is analyzed to confirm sensitivity of the instrument for samples with non-detect analytes associated with a continuing calibration verification standard exhibiting low response (outside the 20%D criteria). The RLV standard shows adequate sensitivity at or below the reporting limit.

The affected analyte(s) and response(s) are:

Analyte Response (%Drift)
Dichlorodifluoromethane -38
Chloromethane -30
Vinyl Chloride -30
Bromomethane -33
Chloroethane -29
Trichlorofluoromethane -35

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

SW-846 8260C

Samples:

SC57271-01 PW-4

Estimated value

Acetone

trans-1,2-Dichloroethene

Exceeded calibration range of the instrument

Tetrachloroethene

SC57271-02 *PW-5*

Estimated value

Acetone

Exceeded calibration range of the instrument

Tetrachloroethene

SC57271-03 PW-6

Estimated value

Methyl Tertiary Butyl Ether trans-1,2-Dichloroethene

Vinyl Chloride

Exceeded calibration range of the instrument

Tetrachloroethene

SC57271-04 PW-7

Estimated value

1,1-Dichloroethene

Exceeded calibration range of the instrument

cis-1,2-Dichloroethene Tetrachloroethene

SC57271-04RE01 PW-7

Estimated value

trans-1,2-Dichloroethene

SC57271-05 PW-8

Estimated value

Acetone

trans-1,2-Dichloroethene

Summary of Hits

Lab ID: SC57271-01			Client ID: PW-4		
Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Acetone	4	J.	100	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	69		5	ug/l	SW-846 8260C
Tetrachloroethene	2300	E.	5	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	2	J.	5	ug/l	SW-846 8260C
Trichloroethene	170		5	ug/l	SW-846 8260C
Lab ID: SC57271-01RE01			Client ID: PW-4		
Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	64		50	ug/l	SW-846 8260C
Tetrachloroethene	2300		50	ug/l	SW-846 8260C
Trichloroethene	170		50	ug/l	SW-846 8260C
Lab ID: SC57271-02			Client ID: PW-5		
Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Acetone	5	J.	100	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	85		5	ug/l	SW-846 8260C
Tetrachloroethene	2700	E.	5	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	12		5	ug/l	SW-846 8260C
Trichloroethene	120		5	ug/l	SW-846 8260C
Vinyl Chloride	6		5	ug/l	SW-846 8260C
Lab ID: SC57271-02RE01			Client ID: PW-5		
Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	76		50	ug/l	SW-846 8260C
Tetrachloroethene	2600		50	ug/l	SW-846 8260C
Trichloroethene	110		50	ug/l	SW-846 8260C
Lab ID: SC57271-03			Client ID: PW-6		
Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	370		5	ug/l	SW-846 8260C
Methyl Tertiary Butyl Ether	3	J.	5	ug/l	SW-846 8260C
Tetrachloroethene	2700	E.	5	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	4	J.	5	ug/l	SW-846 8260C
Trichloroethene	260		5	ug/l	SW-846 8260C
Vinyl Chloride	3	J.	5	ug/l	SW-846 8260C
Lab ID: SC57271-03RE01			Client ID: PW-6		
Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	330		50	ug/l	SW-846 8260C
Tetrachloroethene	2700		50	ug/l	SW-846 8260C
Trichloroethene	250		50	ug/l	SW-846 8260C

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Lab ID: SC57271-04 Client ID: PW-7

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
1,1-Dichloroethene	5	J.	10	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	3900	E.	10	ug/l	SW-846 8260C
Tetrachloroethene	4500	E.	10	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	36		10	ug/l	SW-846 8260C
Trichloroethene	540		10	ug/l	SW-846 8260C
Vinyl Chloride	370		10	ug/l	SW-846 8260C
Lab ID: SC57271-04RE01			Client ID: PW-7		
Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	3700		100	ug/l	SW-846 8260C
Tetrachloroethene	4300		100	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	26	J.	100	ug/l	SW-846 8260C
Trichloroethene	490		100	ug/l	SW-846 8260C
Vinyl Chloride	360		100	ug/l	SW-846 8260C
Lab ID: SC57271-05			Client ID: PW-8		
Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Acetone	0.8	J.	20	ug/l	SW-846 8260C
Chloroform	3		1	ug/l	SW-846 8260C
cis-1,2-Dichloroethene	220		1	ug/l	SW-846 8260C
Methyl Tertiary Butyl Ether	3		1	ug/l	SW-846 8260C
Tetrachloroethene	150		1	ug/l	SW-846 8260C
trans-1,2-Dichloroethene	0.8	J.	1	ug/l	SW-846 8260C
Trichloroethene	9		1	ug/l	SW-846 8260C
Vinyl Chloride	19		1	ug/l	SW-846 8260C

Please note that because there are no reporting limits associated with hazardous waste characterizations or micro analyses, this summary does not include hits from these analyses if included in this work order.

PW-4	lentification			Client P	•		Matrix		ection Date			ceived	
SC57271-01		[no	[none]		Ground Water		15-Jan-20 00:00			Jan-20			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Subcontra	cted Analyses												
Subcontra	acted Analyses												
Analysis pe	erformed by Eurofins Lancast	er Laboratori	ies Environme	ental - 10670)								
56-59-2	cis-1,2-Dichloroethene	69		ug/l	5	1	5	SW-846 8260C	23-Jan-20 23:17	23-Jan-20 23:18	10670	'200231A	u
0061-01-5	cis-1,3-Dichloropropene	< 5		ug/l	5	1	5	"	"	"	"	"	
08-20-3	di-Isopropyl ether	< 5		ug/l	5	1	5	"	"	"	"	"	
24-48-1	Dibromochloromethane	< 5		ug/l	5	1	5	"	"	"	"	"	
4-95-3	Dibromomethane	< 5		ug/l	5	1	5	"	"	"	"	"	
'5-71-8	Dichlorodifluoromethane	< 5		ug/l	5	1	5	"	"	"	"	"	
64-17-5	Ethanol	< 3800		ug/l	3800	1400	5	"	"	"	"	"	
0-29-7	Ethyl ether	< 25		ug/l	25	1	5	"	"	"	"	"	
37-92-3	Ethyl t-butyl ether	< 5		ug/l	5	1	5	"	"	"	"	"	
00-41-4	Ethylbenzene	< 5		ug/l	5	2	5	"	"	"	"	"	
'6-13-1	Freon 113	< 50		ug/l	50	1	5	"	"	"	"	"	
37-68-3	Hexachlorobutadiene	< 25		ug/l	25	10	5	"	"	"	"	"	
8-82-8	Isopropylbenzene	< 25		ug/l	25	1	5	"	"	"	"	"	
79601-23-1	m+p-Xylene	< 25		ug/l	25	5	5	"	"	"	"	"	
634-04-4	Methyl Tertiary Butyl Ether	< 5		ug/l	5	1	5	"	"	"	"	"	
75-09-2	Methylene Chloride	< 5		ug/l	5	2	5	"	"	"	"	"	
04-51-8	n-Butylbenzene	< 25		ug/l	25	1	5	"	"	"	"	"	
03-65-1	n-Propylbenzene	< 25		ug/l	25	1	5	"	"	"	"	"	
1-20-3	Naphthalene	< 25		ug/l	25	5	5	"	"	"	"	"	
5-47-6	o-Xylene	< 5		ug/l	5	2	5	"	"	"	"	"	
9-87-6	p-Isopropyltoluene	< 25		ug/l	25	1	5	"	"	"	"	"	
35-98-8	sec-Butylbenzene	< 25		ug/l	25	1	5	"	"	"	"	"	
00-42-5	Styrene	< 25		ug/l	25	1	5	"	"	"	"	"	
94-05-8	t-Amyl methyl ether	< 25		ug/l	25	4	5	"	"	"	"	"	
75-65-0	t-Butyl alcohol	< 250		ug/l	250	60	5	"	"	"	"	"	
8-06-6	tert-Butylbenzene	< 25		ug/l	25	2	5	"	"	"	"	"	
27-18-4	Tetrachloroethene	2,300	E.	ug/l	5	1	5	"	"	"	"	"	
09-99-9	Tetrahydrofuran	< 50		ug/l	50	4	5	"	"	"	"	"	
08-88-3	Toluene	< 5		ug/l	5	1	5	"	"	"	"	"	
56-60-5	trans-1,2-Dichloroethene	2	J.	ug/l	5	1	5	"	"	"	"	"	
0061-02-6	trans-1,3-Dichloropropene	< 5		ug/l	5	1	5		"	"	"	"	
10-57-6	trans-1,4-Dichloro-2-buten e	< 250		ug/l	250	30	5	"	"	"	"	"	
9-01-6	Trichloroethene	170		ug/l	5	1	5	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 5		ug/l	5	1	5	"	"	"	"	"	
75-01-4	Vinyl Chloride	< 5		ug/l	5	1	5	u u	"	"	"	"	
Surrogate r	recoveries:												
7060-07-0	1,2-Dichloroethane-d4	99			80-12	0 %		u u	"	"	"	"	
160-00-4	4-Bromofluorobenzene	90			80-12	0 %		"	"	"	"	"	
868-53-7	Dibromofluoromethane	96			80-12	0 %		"	"	"	"	"	
2037-26-5	Toluene-d8	93			80-12	0 %		"	"	"	"	"	

<u> </u>	<u>dentification</u>			Client P	-		Matrix		ection Date			ceived	
SC57271-02		[none]			Ground Water		15-Jan-20 00:00			16-Jan-20			
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert
Subcontra	acted Analyses												
Subcontra	acted Analyses												
Analysis pe	erformed by Eurofins Lancast	er Laborator	ies Environme	ental - 1067	9								
156-59-2	cis-1,2-Dichloroethene	85		ug/l	5	1	5	SW-846 8260C	24-Jan-20 00:01	24-Jan-20 00:02	10670	'200231A	,
10061-01-5	cis-1,3-Dichloropropene	< 5		ug/l	5	1	5	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 5		ug/l	5	1	5	m .	"	"	"	"	
124-48-1	Dibromochloromethane	< 5		ug/l	5	1	5	m .	"	"	"	"	
74-95-3	Dibromomethane	< 5		ug/l	5	1	5	m .	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 5		ug/l	5	1	5	m .	"	"	"	"	
64-17-5	Ethanol	< 3800		ug/l	3800	1400	5	"	"	"	"	"	
60-29-7	Ethyl ether	< 25		ug/l	25	1	5	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 5		ug/l	5	1	5	"	"	"	"	"	
100-41-4	Ethylbenzene	< 5		ug/l	5	2	5	"	"	"	"		
76-13-1	Freon 113	< 50		ug/l	50	1	5	"	"	"	"	"	
37-68-3	Hexachlorobutadiene	< 25		ug/l	25	10	5	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 25		ug/l	25	1	5	"	"	"	"	"	
179601-23-1	m+p-Xylene	< 25		ug/l	25	5	5	"	"	"	"	"	
1634-04-4	Methyl Tertiary Butyl Ether	< 5		ug/l	5	1	5	"	"	"	"	"	
75-09-2	Methylene Chloride	< 5		ug/l	5	2	5	"	"	"	"		
104-51-8	n-Butylbenzene	< 25		ug/l	25	1	5	"	"	"	"		
103-65-1	n-Propylbenzene	< 25		ug/l	25	1	5	"	"	"			
91-20-3	Naphthalene	< 25		ug/l	25	5	5	"		"			
95-47-6	o-Xylene	< 5		ug/l	5	2	5	"	"	"		"	
99-87-6	p-Isopropyltoluene	< 25		ug/l	25	1	5	"		"			
135-98-8	sec-Butylbenzene	< 25		ug/l	25	1	5	"		"			
100-42-5	Styrene	< 25		ug/l	25	1	5	"	"	"	"	"	
994-05-8	t-Amyl methyl ether	< 25		ug/l	25	4	5	"		"	"		
75-65-0	t-Butyl alcohol	< 250		ug/l	250	60	5	"		"	"		
98-06-6	tert-Butylbenzene	< 25		ug/l	25	2	5	"	"	"	"		
127-18-4	Tetrachloroethene	2,700	E.	ug/l	5	1	5	"	"	"			
109-99-9	Tetrahydrofuran	< 50		ug/l	50	4	5	"	"	"	"		
108-88-3	Toluene	< 5		ug/l	5	1	5	"		"			
156-60-5	trans-1,2-Dichloroethene	12		ug/l	5	1	5	"		"			
10061-02-6	trans-1,3-Dichloropropene	< 5		ug/l	5	1	5	"		"			
110-57-6	trans-1,4-Dichloro-2-buten	< 250		ug/l	250	30	5	"	"	"	"	"	
79-01-6	Trichloroethene	120		ug/l	5	1	5	"	"	"		"	
75-69-4	Trichlorofluoromethane	< 5		ug/l	5	1	5	"	"	"		"	
75-01-4	Vinyl Chloride	6		ug/l	5	1	5	"	"	"		"	
	recoveries:												
17060-07-0	1,2-Dichloroethane-d4	101			80-12	0 %		II .	"	"	"	"	
460-00-4	4-Bromofluorobenzene	90			80-12	0 %		"	"	"	"	"	
1868-53-7	Dibromofluoromethane	98			80-12	0 %		n .	"	"	"	"	
2037-26-5	Toluene-d8	93			80-12	0 %		ıı	"	"	"	"	
Re-an alys	sis of Subcontracted Analys												
	by method SW-846 5030C												

80-120 %

2037-26-5

Toluene-d8

94

Sample Id	lentification			Client P	roject#		Matrix	Colle	ection Date	/Time	Re	ceived	
PW-6				[no	•		Ground W		5-Jan-20 00			Jan-20	
SC57271-	-03			[0			Oloulla III		- va n 2 0 00	.00	10	vun 20	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontra	cted Analyses												
Subcontra	acted Analyses												
Analysis pe	erformed by Eurofins Lancast	er Laboratori	ies Environme	ental - 10670)								
156-59-2	cis-1,2-Dichloroethene	370		ug/l	5	1	5	SW-846 8260C	24-Jan-20 00:45	24-Jan-20 00:46	10670	'200231A	J
10061-01-5	cis-1,3-Dichloropropene	< 5		ug/l	5	1	5	"	"	"	"	"	
108-20-3	di-Isopropyl ether	< 5		ug/l	5	1	5	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 5		ug/l	5	1	5	"	"	"	"	"	
74-95-3	Dibromomethane	< 5		ug/l	5	1	5	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 5		ug/l	5	1	5	"	"	"	"	"	
64-17-5	Ethanol	< 3800		ug/l	3800	1400	5	"	"	"	"	"	
60-29-7	Ethyl ether	< 25		ug/l	25	1	5	"	"	"	"	"	
637-92-3	Ethyl t-butyl ether	< 5		ug/l	5	1	5	"	"	"	"	"	
100-41-4	Ethylbenzene	< 5		ug/l	5	2	5	"	"	"	"	"	
76-13-1	Freon 113	< 50		ug/l	50	1	5	"	"	"	"	"	
87-68-3	Hexachlorobutadiene	< 25		ug/l	25	10	5	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 25		ug/l	25	1	5	"	"		"		
179601-23-1	m+p-Xylene	< 25		ug/l	25	5	5	"	"		"		
1634-04-4	Methyl Tertiary Butyl Ether	3	J.	ug/l	5	1	5		u u	"	"	"	
75-09-2	Methylene Chloride	< 5		ug/l	5	2	5		"	"	"	"	
104-51-8	n-Butylbenzene	< 25		ug/l	25	1	5		u u	"	"	"	
103-65-1	n-Propylbenzene	< 25		ug/l	25	1	5	"	"		"		
91-20-3	Naphthalene	< 25		ug/l	25	5	5	"	u	u	"	"	
95-47-6	o-Xylene	< 5		ug/l	5	2	5	"	"		"		
99-87-6	p-Isopropyltoluene	< 25		ug/l	25	1	5		u u	"	"	"	
135-98-8	sec-Butylbenzene	< 25		ug/l	25	1	5		u u	"	"	"	
100-42-5	Styrene	< 25		ug/l	25	1	5		u u	"	"	"	
994-05-8	t-Amyl methyl ether	< 25		ug/l	25	4	5		u u	"	"	"	
75-65-0	t-Butyl alcohol	< 250		ug/l	250	60	5	"	"		"		
98-06-6	tert-Butylbenzene	< 25		ug/l	25	2	5		u u	"	"	"	
127-18-4	Tetrachloroethene	2,700	E.	ug/l	5	1	5	"	"		"		
109-99-9	Tetrahydrofuran	< 50		ug/l	50	4	5	"	"		"		
108-88-3	Toluene	< 5		ug/l	5	1	5	"	"		"		
156-60-5	trans-1,2-Dichloroethene	4	J.	ug/l	5	1	5	"	"		"		
10061-02-6	trans-1,3-Dichloropropene	< 5		ug/l	5	1	5	"	"		"		
110-57-6	trans-1,4-Dichloro-2-buten e	< 250		ug/l	250	30	5	"	н	"	"	"	
79-01-6	Trichloroethene	260		ug/l	5	1	5	"	"	"	"	"	
75-69-4	Trichlorofluoromethane	< 5		ug/l	5	1	5	"	"		"		
75-01-4	Vinyl Chloride	3	J.	ug/l	5	1	5	"	"	"	"	"	
Surrogate i	recoveries:												
17060-07-0	1,2-Dichloroethane-d4	100			80-12	0 %		"	"	"	"	"	
460-00-4	4-Bromofluorobenzene	88			80-12	0 %		"	"	"	"	"	
1868-53-7	Dibromofluoromethane	99			80-12	0 %		"	"	"	"	"	
2037-26-5	Toluene-d8	92			80-12	0 %		"	"	"	"	"	
	sis of Subcontracted Analy by method SW-846 50300												

PW-7	entification			Client Pr	-		Matrix Ground W		ection Date 5-Jan-20 00			ceived Jan-20	
SC57271-	04			[IIOI			Ground W	ater 13	- Ju ii-20 00	.00	10-	Jan-20	
CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cei
ubcontra	cted Analyses												
Subcontra	icted Analyses												
Analysis pe	erformed by Eurofins Lancast	er Laboratori	ies Environme	ental - 10670									
156-59-2	cis-1,2-Dichloroethene	3,900	E.	ug/l	10	2	10	SW-846 8260C	24-Jan-20 01:29	24-Jan-20 01:30	10670	'200231A	ı
0061-01-5	cis-1,3-Dichloropropene	< 10		ug/l	10	2	10	"	"	"	"	"	
08-20-3	di-Isopropyl ether	< 10		ug/l	10	2	10	"	"	"	"	"	
24-48-1	Dibromochloromethane	< 10		ug/l	10	2	10	"	"		"		
4-95-3	Dibromomethane	< 10		ug/l	10	2	10	"	"		"		
5-71-8	Dichlorodifluoromethane	< 10		ug/l	10	2	10	"	"	"	"	"	
4-17-5	Ethanol	< 7500		ug/l	7500	2800	10	"	"	"		"	
0-29-7	Ethyl ether	< 50		ug/l	50	2	10	"	"	"	"	"	
37-92-3	Ethyl t-butyl ether	< 10		ug/l	10	2	10	"	"	"	"	"	
00-41-4	Ethylbenzene	< 10		ug/l	10	4	10	"	"				
6-13-1	Freon 113	< 100		ug/l	100	2	10	"	u u	"			
7-68-3	Hexachlorobutadiene	< 50		ug/l	50	20	10		"	"		"	
8-82-8	Isopropylbenzene	< 50		ug/l	50	2	10		"	"			
79601-23-1		< 50		ug/l	50	10	10	"	"	"	"	"	
634-04-4	Methyl Tertiary Butyl Ether	< 10		ug/l	10	2	10	"	"	"	"		
5-09-2	Methylene Chloride	< 10		ug/l	10	3	10	"		"			
04-51-8	n-Butylbenzene	< 50		ug/l	50	2	10	"		"			
03-65-1	n-Propylbenzene	< 50		ug/l	50	2	10			"	"		
1-20-3	Naphthalene	< 50		ug/l	50	10	10	"	"				
5-47-6	o-Xylene	< 10		ug/l	10	4	10	"	"				
9-87-6	p-Isopropyltoluene	< 50		ug/l	50	2	10	"	"				
35-98-8	sec-Butylbenzene	< 50			50	2	10	,,		"			
00-42-5	•			ug/l				"					
94-05-8	Styrene	< 50		ug/l	50	2	10	"			,,		
	t-Amyl methyl ether	< 50		ug/l	50	8	10						
5-65-0	t-Butyl alcohol	< 500		ug/l	500	120	10						
8-06-6	tert-Butylbenzene	< 50	_	ug/l	50	3	10					"	
27-18-4	Tetrachloroethene	4,500	E.	ug/l	10	2	10						
09-99-9	Tetrahydrofuran	< 100		ug/l	100	7	10						
08-88-3	Toluene	< 10		ug/l	10	2	10	"	"				
56-60-5	trans-1,2-Dichloroethene	36		ug/l	10	2	10		"	"	"	"	
0061-02-6	trans-1,3-Dichloropropene	< 10		ug/l	10	2	10		"	"	"	"	
10-57-6	trans-1,4-Dichloro-2-buten e	< 500		ug/l	500	60	10	"	"	"	"	"	
9-01-6	Trichloroethene	540		ug/l	10	2	10	u	"		"	"	
75-69-4	Trichlorofluoromethane	< 10		ug/l	10	2	10	"	"	"	"	"	
5-01-4	Vinyl Chloride	370		ug/l	10	2	10	"	"	ıı	"	"	
urrogate r	ecoveries:												
7060-07-0	1,2-Dichloroethane-d4	100			80-12	0 %		"	"	"	"	"	
60-00-4	4-Bromofluorobenzene	89			80-12	0 %		"	"	"	"	"	
868-53-7	Dibromofluoromethane	100			80-12	0 %		"	"	"	"	"	
037-26-5	Toluene-d8	93			80-12	0 %		"				"	

Notes and Definitions

E. Exceeded calibration range of the instrument

J. Estimated value

dry Sample results reported on a dry weight basis

NR Not Reported

RPD Relative Percent Difference

<u>Laboratory Control Sample (LCS)</u>: A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

<u>Matrix Spike</u>: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

<u>Surrogate</u>: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

<u>Continuing Calibration Verification:</u> The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

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Standard TAT - 7 to 10 business days

Special Handling:

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Spectrum Analytical	Page of	All TATs subject to laboratory approval Min. 24-hr notification needed for rushes Samples disposed after 30 days unless otherwise instructed.
Report To: ESE Inc	Invoice To: FRE pro	Project No:
Lancaster NY 14086		Site Name: MT CS OM & M
and the second s		Location: East Autors State: NY
Telephone #: (716) 684-8060 Project Mgr. Jose Hermin dez	P.O No.: Quote #:	Sampler(s): R, Allen, D. Iyer
F=Field Filtered 1=Na ₂ S2O ₃ 2=HCl 3=H ₂ SO ₄ 4=HNO ₃ 5=NaOH 6=Ascorbic Acid	S=NaOH 6=Ascorbic Acid	List Preservative Code below: QA/QC Reporting Notes:
/=CH3OH o-NaH3O4 y-Delonized water 10-H3FO4		

			1.00	00/0	-	1	WIN	CALX	
		Corecction Factor	(2)	-	•	Ma	Shi	100	
Ramirez Hernandez E, ene. com	E-mail to: TRamire	Observed X					Fellex	- Allen J-	Jan Jan
The state of the s	EDD format: PD	Temp °C	Time:	Date:		by:	Received by:	Relinquished by:	Relinqu
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, ,			100						
cop er	2								
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Do not send									.M
		<		W	G GW		4	PW-00	-35
7		<		W	G GW	0	>	PW-7	-04
another Sample		<		W	6 EW			PW-6	હ્યુ
- Please send		<		W	C CW		`	PW - ST	-01
1.		<		W	C Qu		1/15/2020	PW-A	5-57271-01
Che State-specific reporting standards:				-	-	Time:	Date:	Sample ID:	Lab ID:
∏ier II*		V	Clear		ype		C=Compsite	G= Grab	G=
ASP A* ASP B*	1	00	Glass	Vials er Glass			X3=	X2=	X]=
		25		S		Gas	nbient Air SG=Soil Gas	SL=Sludge A=Indoor/Ambient Air	O=Oil SO=Soil
MA DEP MCP CAM Report? Yes No	Analysis		Containers	C		ww=Waste Water	SW=Surface Water WW	GW=Groundwater SW=	DW =Drinking Water
auunonai viiaiges may apppiy		2							
QA/QC Reporting Notes:	List Preservative Code below:	List Pr			6=Ascorbic Acid	5=NaOH 6=A:	4=HNO ₃	F=Field Filtered 1=Na ₂ S2O ₃ 2=HCl 3=H ₂ SO ₄ 7=CH3OH 8=NaHSO ₄ 9=Deionized Water 10=H ₃ PO ₄	F=Field Filtered 1 7=CH3OH 8=NaHS
	2000		Zuore in			1.00100.		7036	Project Mgr.
7			hioto ti			DO NO.	700000		

Ambient VIced

☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Attachment B IEG Summary of Field Activities

January 2020

NYSDEC Site #9-15-157

OM&M: SITE INSPECTION FORM

DATE:	6-Jan-2	20	ACTIVITIES:	Site Inspec	tion				
INSPECT	TION PERSONNEL	.: R. Allen		OTHER PERS	SONNEL:				
WEATHE	R CONDITIONS:	Cloudy, cool				OUTSIDE	TEMPERATU	JRE (° F):	34
ARE WE	LL PUMPS OPERA	ATING IN AUTO:	YES:	NO:	√	If "NO", pro	vide explanati	on below	
-	RW-1, PW-2 and F	W-3 are manually se	et to OFF position;	PW-4 through	PW-8 are on AUT	0			
-		PRO	VIDE WATER LEV	EL READINGS	ON CONTROL PA	NEL			
RW-1	on:	OFF:	14 ft	PW-5	ON:	OFF:	√	5 ft	
PW-2	ON:	OFF: √	11 ft	PW-6	ON:	OFF:	<u>√</u>	6 ft	
PW-3	on:	OFF:	12 ft	PW-7	ON:	OFF:	√	7ft	
PW-4	ON:	off: √	6 ft	PW-8	ON:	OFF:	√	4ft	
		ALIZATION TANK: _	ft	Last	Alarm D/T/Condition	n: 11/1/2019	Air Stripper Lov	w Pressure	
	NOTES:								
INFLU	ENT FLOW RATE:	0	gpm	INFLUENT T	OTALIZER READING	: <u>1885811</u>	0	ga	allons
SE(OUESTERING AGE	ENT DRUM LEVEL:	18 inches	(v 1 :	7=) AMOUNT OF	AGENT DEM	TAINING:	31	allons
		GENT FEED RATE: _		(*		IG PUMP PRE		p:	
	BAG FILTER PRE	ESSURES:	Top LEFT: 0	Bottom psi	i RIGHT:		Top E	Bottom O ps	si
INFLU	ENT FEED PUMP	IN USE: #1_	√ #2	: !	INFLUENT PUMP F	PRESSURE:	7	p:	 si
AIR S	TRIPPER BLOWE	:R IN USE: #1	√ #2	 !	AIR STRIPPER F	PRESSURE:	17	in	. H ₂ O
AIR STR	IPPER DIFFEREN	TIAL PRESSURE:	broken		DISCHARGE F	_		in	. H₂O
	TEMP: 1500 81.4	fpm X 1.4 = _ °F	2100	_CFM S	AIR SPARGER LEFT	5.4	RIGHT	3.0 c	FM
EFFLU	ENT PUMP IN USE:	#1	#2 <u></u>	EFFLU	ENT FEED PUMP F	PRESSURE:	4	ps	si
EFFL	UENT FLOW RATE:	84gpm	EFFLUENT	TOTALIZER R	EADING: 8	35,905,14	1 5	68640 ga	allons
ARE I	BUILDING HEATERS	S IN USE? YES:	√ NO:	 :		INSIDE	TEMPERATU	JRE (° F):	60
IS SUI	MP PUMP IN USE:	YES:	NO:	ARE ANY	LEAKS PRESENT	? YES:_		NO:	V
WATER	LEVEL IN SUMP:	6.5in.	TREATMENT E	BUILDING CLE	AN & ORGANIZED?	? YES:_	<u> </u>	NO:	

NYSDEC Site #90150157 SITE INSPECTION FORM

6-Jan-20 **SAMPLES COLLECTED?** NO: Sample ID Time of Sampling pH Turbidity Temp. Sp. Cond. AIR STRIPPER INFLUENT: AIR STRIPPER EFFLUENT: IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? NO: WERE MANHOLES INSPECTED? YES: WERE ELECTRICAL BOXES INSPECTED? YES: NO: IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? If yes, provide manhole/electric box ID and description of any corrective measures below: RW-1 inner ring is corroded. Most of the MWs and UEs are covered with snow or ice. **SUBSLAB SYSTEMS** TREATMENT ROOM MANOMETER: 1.3 in. WC west east **NOTES:** cfm = 0.05 x fpm (3" PVC)(Fan Inlet) FLOW (fpm): CONDENSATE 1.0 gallon FLOW (cfm): DRAINED Yes VACUUM GAUGE (in WC) OTHER LOCATIONS NO____ VOLUME: ---- gallon 586 Building SVE CONDENSATE drained: INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE Remarks: 586 Building SVE System is OFF for freezing temperatures. Other Actions: Poured remainder of old Redux solution drum into present drum. Rinsed out old drum. **AGWAY** Site is empty of materials and has been graded and graveled. Remarks:

NYSDEC Site #9-15-157

OM&M: SITE INSPECTION FORM

DATE:	17-Jan-20		ACTIVITIES:	Site Inspec	tion			
INSPEC	TION PERSONNEL:	R. Allen		OTHER PERS	SONNEL:			
WEATHE	R CONDITIONS: Cle	ear, cold				OUTSIDE TEM	PERATURE (° F):	15
ARE WE	LL PUMPS OPERATIN	IG IN AUTO:	YES:	NO:		If "NO", provide e	xplanation below	ı
	RW-1, PW-2 and PW-3	3 are manually set	to OFF position;	; PW-4 through	PW-8 are on AUTO)		
		PRO\	VIDE WATER LEV	EL READINGS	ON CONTROL PAN	IE L		
RW-1	on:	OFF:	14 ft	PW-5	ON:	off: √	5	_ft
PW-2	ON:	off :	11 ft	PW-6	ON:	off: <u>√</u>	5	_ft
PW-3	on:	OFF:	12 ft	PW-7	ON:	off: <u>√</u>	5	_ft
PW-4	ON:	off:	3 ft	PW-8	ON:	off:√	3	_ft
	EQUALIZ	ZATION TANK:	3ft	Last	Alarm D/T/Condition:	1/12/2020 Air Str	ipper Hi Level	
	NOTES:							
INFLU	ENT FLOW RATE:	0	gpm	INFLUENT T	OTALIZER READING:	18916013		gallons
SEC	QUESTERING AGENT	DRUM LEVEL:	15 inches	(x 1.7	7=) AMOUNT OF	AGENT REMAININ	ıg: 26	gallons
	EQUESTERING AGEN		ml/min	•	•	G PUMP PRESSUF		_psi
			Тор	Bottom		Тор		
	BAG FILTER PRESSU	URES:	LEFT: 0	psi	i RIGHT:	8	0	_psi
INFLU	IENT FEED PUMP IN U	JSE: #1	#2	2	INFLUENT PUMP P	RESSURE:	7	_psi
AIR S	STRIPPER BLOWER IN	<i>I USE:</i> #1	#2	2	AIR STRIPPER P	RESSURE:	19	in. H ₂ O
AIR STR	IPPER DIFFERENTIAL	. PRESSURE:	broken	_in. H₂O	DISCHARGE PI	RESSURE:	3.4	_in. H₂O
	FLOW: 1400 fp TEMP: 80 °F	·	1960	_CFM S	AIR SPARGER LEFT	5.3 RIGH	т 3.0	_CFM
EFFLU	IENT PUMP IN USE:	#1	#2√	EFFLU	ENT FEED PUMP P	RESSURE:	4	psi
EFFL	UENT FLOW RATE:	85 gpm	EFFLUENT	TOTALIZER R	EADING: 8	5,944,887	608280	gallons
ARE I	BUILDING HEATERS IN	USE? YES:		:		INSIDE TEM	PERATURE (° F):	55
IS SU	MP PUMP IN USE:	YES:	NO:	_ ARE ANY	LEAKS PRESENT?	YES:	NO	: <u>\</u>
WATER	R LEVEL IN SUMP:	6.0 in.	TREATMENT E	BUILDING CLE	AN & ORGANIZED?	YES:	NO	:

NYSDEC Site #90150157 SITE INSPECTION FORM

17-Jan-20 **SAMPLES COLLECTED?** NO: Well Samples taken Jan 15 Sample ID Time of Sampling pH Turbidity Temp. Sp. Cond. AIR STRIPPER INFLUENT: AIR STRIPPER EFFLUENT: IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? WERE MANHOLES INSPECTED? YES: NO: WERE ELECTRICAL BOXES INSPECTED? YES: NO: IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? If yes, provide manhole/electric box ID and description of any corrective measures below: RW-1 inner ring is corroded. **SUBSLAB SYSTEMS** TREATMENT ROOM MANOMETER: 1.3 in. WC west east **NOTES:** cfm = 0.05 x fpm (3" PVC)980 (Fan Inlet) FLOW (fpm): 540 CONDENSATE 0.5 gallon FLOW (cfm): 49 DRAINED Yes VACUUM GAUGE (in WC) OTHER LOCATIONS 586 Building SVE CONDENSATE drained: INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE Remarks: 586 Building SVE System is OFF for freezing temperatures. Other Actions: Jan 13 - Air Stripper Control Panel: Low Air Pressure alarm. - AutoDialer Alarm Code 03. Reset - OK **AGWAY** Site is empty of materials and has been graded and graveled.

Remarks:

NYSDEC Site #9-15-157

OM&M: SITE INSPECTION FORM

DATE:	31-Jan-	·20	ACTIVITIES:	Site Inspec	tion				
INSPEC	TION PERSONNEL	.: R. Allen		OTHER PER	SONNEL:				
WEATHE	R CONDITIONS:	Cloudy, cold				OUTSIDI	E TEMPERA	TURE (° F):	30
ARE WE	LL PUMPS OPER	ATING IN AUTO:	YES:	NO:	$\sqrt{}$	If "NO", pro	vide explan	ation below	
	RW-1, PW-2 and F	PW-3 are manually se	et to OFF position;	; PW-4 throug	n PW-8 are on AUTO)			
		PRO	VIDE WATER LEV	EL READINGS	ON CONTROL PAI	NEL			
RW-1	on: √	OFF:	14 ft	PW-5	ON:	OFF:	√	6	_ft
PW-2	ON:	off: √	11 ft	PW-6	ON:	OFF:	√	7	ft
PW-3	on:	OFF:	12 ft	PW-7	ON:	OFF:	√	3	ft
PW-4	ON:	OFF : √	4 ft	PW-8	ON:	OFF:	√ <u> </u>	3	ft
	EQU	ALIZATION TANK: _	3ft	Last	Alarm D/T/Condition	: 1/12/2020	Air Stripper I	Hi Level	
	NOTES:								
INFLU	ENT FLOW RATE	. 7	gpm	INFLUENT 1	OTALIZER READING	: 1895285	5		gallons
	OUESTERING AGE		11 inches	(× 1	7=) AMOUNT OF	ACENT DEA	AAINING.	10	
		ENT DRUM LEVEL: _ GENT FEED RATE:		(X 1.	•	IG PUMP PRE			_gallons psi
			Top	Bottom			Top	Bottom	
	BAG FILTER PR	ESSURES:	LEFT: 0	0 ps	i RIGHT:		8	0	_psi
INFLU	ENT FEED PUMP	IN USE: #1_	√ #2	?	INFLUENT PUMP F	PRESSURE:	7	,	psi
AIR S	TRIPPER BLOWE	:R IN USE: #1	√ #2	 !	AIR STRIPPER F	PRESSURE:	0.3 (8	3.31)	in. H₂O
AIR STR	IPPER DIFFEREN	TIAL PRESSURE:	broken		DISCHARGE F	_	_	_	in. H₂O
	FLOW: 1500 TEMP: 80	_ fpm X 1.4 = _ ^F	2100	_CFM	AIR SPARGER LEFT	7.0	RIGHT	3.2	CFM
EFFLU	ENT PUMP IN USE:	#1	#2 <u></u>	EFFLU	IENT FEED PUMP F	PRESSURE:	4	ı	psi
EFFL	UENT FLOW RATE:	80 gpm	EFFLUENT	TOTALIZER R	READING: 8	5,969,79	2	633180	gallons
ARE	BUILDING HEATER	S IN USE? YES:	√ NO:	:		INSIDI	E TEMPERA	TURE (° F):	60
IS SU	MP PUMP IN USE:	YES:	NO:	ARE ANY	LEAKS PRESENT?	YES:	$\sqrt{}$	NO:	
WATER	LEVEL IN SUMP:	in.	TREATMENT E	BUILDING CLE	AN & ORGANIZED?	YES:	<u>√</u>	NO:	

NYSDEC Site #90150157 SITE INSPECTION FORM

31-Jan-20 **SAMPLES COLLECTED?** Sample ID Time of Sampling pH Turbidity Temp. Sp. Cond. AIR STRIPPER INFLUENT: AIR STRIPPER EFFLUENT: IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? YES: √___ NO: WERE MANHOLES INSPECTED? WERE ELECTRICAL BOXES INSPECTED? YES: NO: IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? If yes, provide manhole/electric box ID and description of any corrective measures below: RW-1 inner ring is corroded. Most of the MWs and UEs are covered with snow or ice. **SUBSLAB SYSTEMS** TREATMENT ROOM MANOMETER: 1.3 in. WC west east **NOTES:** cfm = 0.05 x fpm (3" PVC)(Fan Inlet) FLOW (fpm): CONDENSATE ----- gallon FLOW (cfm): DRAINED No VACUUM GAUGE (in WC) OTHER LOCATIONS NO____ VOLUME: ----_ gallon 586 Building SVE CONDENSATE drained: INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE **Remarks:** 586 Building SVE System is OFF for freezing temperatures. Moisture observed on southwest corners of Air Stripper. Other Actions: Cleaned Air Stripper with Muriatic Acid, power sprayer and vacuum. **AGWAY** Site is empty of materials and has been graded and graveled.

Remarks:

Attachment C Summary of Site Utility Costs and Projections January to December 2020

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs NYSDEC Work Assignment #1703074.0011.11 12 Months of System Operation and Maintenance January 2020 Report

Utility Budget:	Electric:	\$25,300.00
	Telephone:	\$540.00
	Gas	\$1,120.00
	Total:	\$26,960.00

Gas and Electric

Utility Provider	Account #	E&E Cost Center	Description	Jan-2019	Feb-2019	Mar-2019	Apr-2019	May-2019	Jun-2019
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs						
New York State E&G	76-311-11-015900-18		IVII. US Electric Costs						
National Fuel Gas	7160295 10	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	\$ 285.23					
			Totals	\$ 285.23	\$ -	\$ -	\$ -	\$ -	\$ -
				Jul-2019	Aug-2019	Sep-2019	Oct-2019	Nov-2019	Dec-2019
			Mr. C's Electric Costs						
			Mr. C's Natural Gas Costs						
			Totals	\$	s -	\$ -	\$ -	\$ -	s -

Electric - Mr. C's \$

Notes:

Natural Gas - Mr. C's \$

285.23

Overbilled natural gas costs - no charges

Grand Total - NYSE&G/National Fuel Gas Costs To Date \$ 285.23

Estimated Reading

Telephone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2019	Feb-2019	Mar-2019	Apr-2019	May-2019	Jun-2019
Granite Telecommunications									
Account # 01890582	866-874-5500	EN-003229-0001-03TTO	Mr. C's Telephone Costs	Jul-2019	Aug-2019	Sep-2019	Oct-2019	Nov-2019	Dec-2019

Verizon Costs to Date - Mr. C's \$

Grand Total All Utilities To Date \$ 285.23

Monthly Average Costs

Mr. C's Electric	N/A
Mr. C's Gas	\$ 285.23
Mr. C's Telephone	N/A
Average Utility Cost Total	\$ 285.23
12 Month Estimate	\$ 3,422.76

Budget Remaining:	Electric:	\$25,300.00
	Telephone:	\$540.00
	Gas	\$834.77
	Total:	\$26,674.77