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

BUFFALO CORPORATE CENTER
368 Pleasant View Drive
Lancaster, New York 14086
Tel: (716) 684-8060, Fax: (716) 684-0844

January 21, 2019

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
December 2018 Operations, Maintenance, and Monitoring Report

Dear Mr. Long:

Ecology and Environment Engineering and Geology, P.C. (E&E) is pleased to provide the December 2018 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 December 2018 reporting period, the treatment system was in operation from November 28, 2018 to January 2, 2019. The December monthly OM&M sampling was performed on January 2, 2019, and the results were received from SAI on January 10, 2019 (See Attachment A). A summary of field activities prepared by E&E's subcontractor, IYER Environmental Group, PLLC. (IEG), is provided in Attachment B. The current annual site utility cost information is provided in Attachment C.

In response to the 2017 Periodic Review Report, it was requested that testing of the groundwater from the pumping wells in operation be performed on a quarterly schedule. The next round of quarterly testing of the pumping wells shall occur in January 2019.

In review of the on-site treatment system operations, monitoring and maintenance from IEG for December 2018, 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 November 28, 2018 through January 2, 2019, had an approximate operational up-time of 100%, and 163,544 gallons of contaminated groundwater was treated during the reporting period. The treated effluent volumes and operational up-time can be seen in Table 1.
- The compliance samples from January 2, 2019 had discharge effluent concentrations for cis-1,2-dichloroethene, methyl tert-butyl ether, trichloroethene, tetrachloroethene, and vinyl chloride below the daily SPDES Equivalency permit requirements of 10 µg/L for each contaminant. All other requirements of the SPDES Equivalency permit were also met. The effluent results for January 2, 2019 are provided in Table 2.

- The analytical summary results of the January 2, 2019 samples revealed the total volatile organic contaminant concentrations of the influent to be 5,529.90 µg/L and the concentration of total volatile organic contaminants in the effluent was 4.50 µg/L. The summary of influent and effluent contaminant concentrations for the December 2018 sampling are presented in Table 3. Acetone was detected in the effluent sample, but not the influent sample. It is suspected that this is due to lab contamination. Figure 1 shows the influent and effluent VOC concentrations during each sampling event in 2017 and 2018.
- The Mr. C's treatment system, based on the total flows from the uptime operations, removed 7.54 lbs. of targeted contaminants from the groundwater between November 28, 2018 to January 2, 2019. The cleanup effectiveness for December 2018 was approximately 99. 92%. The calculations and data for the month are presented in Table 3. The mass of VOCs removed each month throughout 2017 and 2018 is shown in Figure 2.

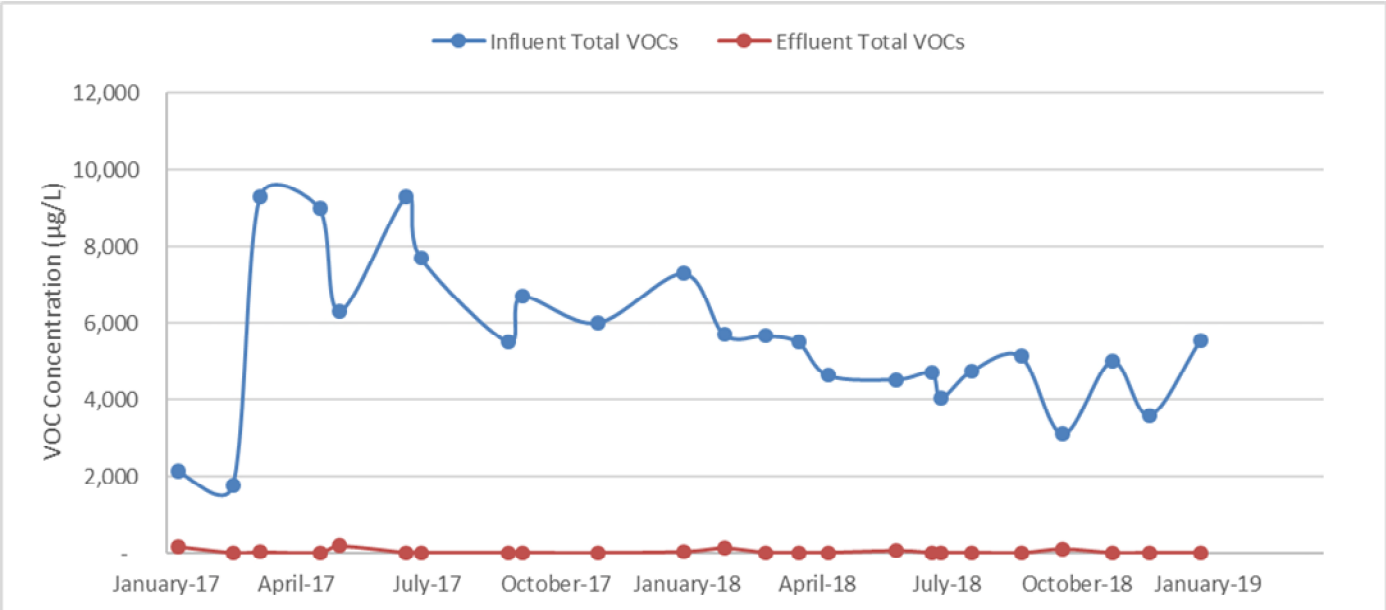

Figure 1: Monthly Influent and Effluent VOC concentrations - 2017 and 2018.

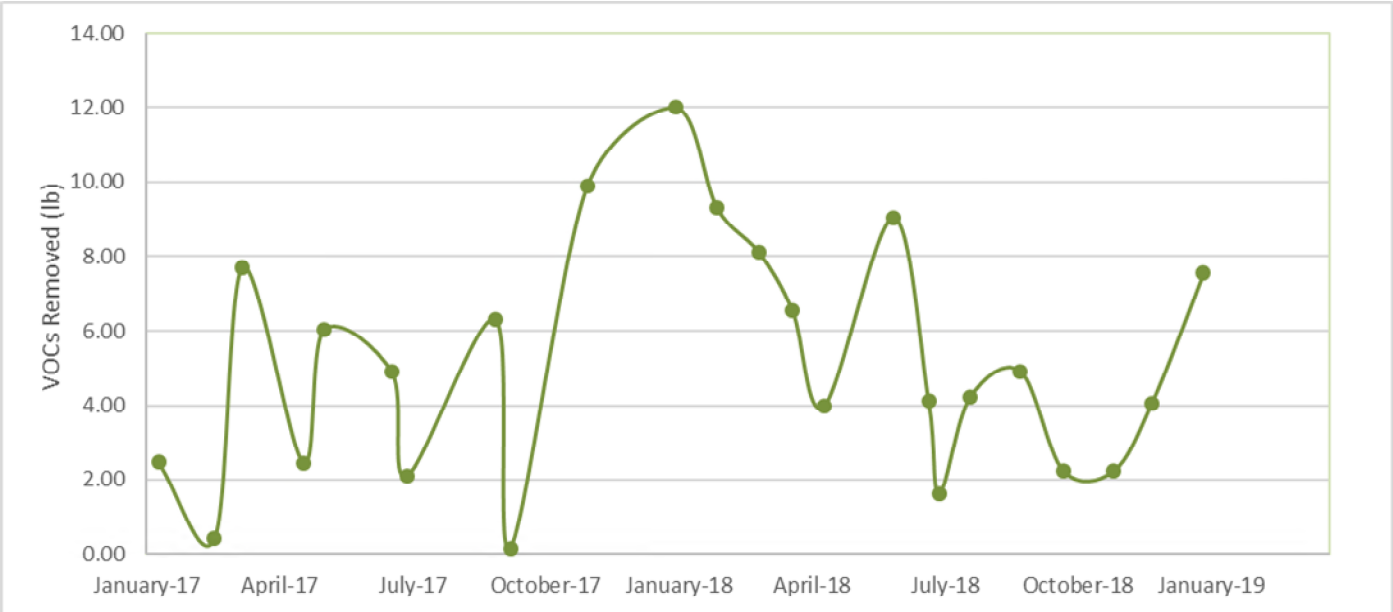

Figure 2: Mass of VOCs removed each month - 2017 and 2018.

If you have questions regarding the December 2018 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,
Ecology and Environment Engineering and Geology, P. C.

Ashlee Smith
Project Manager

cc: D. Szymanski, Region 9, NYSDEC – Buffalo w/ attachments
D. Iyer, IEG w/ attachments
M. Mooney, E&E Buffalo w/ attachments
CTF - 10C3074.0011.11

Attachment A
Excerpts from the Groundwater Treatment System Analytical Report from Spectrum Analytical Laboratories

Analytical Data Package Work Order ID: SC52919
Sampled by IEG: January 2, 2019
Report Received: January 10, 2019

eurofins | Spectrum Analytical

☑ Final Report
☐ Revised Report

Report Date:
10-Jan-19 15:54

Laboratory Report
SC52919

Ecology and Environment, Inc.
368 Pleasant View Drive
Lancaster, NY 14086
Attn: Mary Kate Mooney

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.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87936
Maine # MA138
New Hampshire # 2972/2538
New Jersey # MA011
New York # 11393
Pennsylvania # 68-04426/68-02924
Rhode Island # LAO00348
USDA # P330-15-00375
Vermont # VT-11393

Authorized by:

Dawn Wojcik
Laboratory Director

Dawn E Wojcik

Eurofins Spectrum Analytical 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 23 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 Spectrum Analytical, Inc.

Eurofins Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Eurofins Spectrum Analytical, Inc. is currently accredited for the specific method or analyte indicated. Please refer to our 'Quality' web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Eurofins Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (PA-68-04426).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

Sample Summary

Work Order: SC52919

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

Project Number: [none]

Laboratory ID	Client Sample ID	Matrix	Date Sampled	Date Received
SC52919-01	Influent	Ground Water	02-Jan-19 13:00	03-Jan-19 10:17
SC52919-02	Effluent	Ground Water	02-Jan-19 13:00	03-Jan-19 10:17
SC52919-03	HCl TB	Trip Blank	02-Jan-19 13:00	03-Jan-19 10:17

Summary of Hits

Lab ID: SC52919-01 **Client ID:** Influent

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Hardness (CaCO3)	509		0.1	mg/L	E200.7
Methyl t-butyl ether (MTBE)	9.9	J.	20	ug/L	SW8260C
trans-1,2-Dichloroethene	10	J.	20	ug/L	SW8260C
Trichloroethene	300		20	ug/L	SW8260C
Vinyl chloride	210		20	ug/L	SW8260C

Lab ID: SC52919-01RE1 **Client ID:** Influent

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
cis-1,2-Dichloroethene	2700		200	ug/L	SW8260C
Tetrachloroethene	2300		200	ug/L	SW8260C

Lab ID: SC52919-02 **Client ID:** Effluent

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Hardness (CaCO3)	512		0.1	mg/L	E200.7
Acetone	4.5	S	2.5	ug/L	SW8260C

Lab ID: SC52919-03 **Client ID:** HCl TB

Parameter	Result	Flag	Reporting Limit	Units	Analytical Method
Bromomethane	0.29	J.	1.0	ug/L	SW8260C

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 Identification	Client Project #	Matrix	Collection Date/Time	Received
Influent	[none]	Ground Water	02-Jan-19 13:00	03-Jan-19
SC52919-01				

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
General Chemistry Parameters													
	pH	**7.08**	pH	pH Units			1	ASTM D 1293-99B	03-Jan-19 12:00	03-Jan-19 18:37	BD	1900017	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Hardness (CaCO3)	**509**		mg/L	0.1		1	E200.7	02-Jan-19 13:00	04-Jan-19 13:17	11301	'[none]'	
Subcontracted Analyses Prepared by method SW8260C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
71-55-6	1,1,1-Trichloroethane	< 20		ug/L	20	5.0	20	SW8260C	"	04-Jan-19 14:31	11301	462312A	
79-34-5	1,1,2,2-Tetrachloroethane	< 20		ug/L	20	5.0	20	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 20		ug/L	20	5.0	20	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 20		ug/L	20	5.0	20	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 20		ug/L	20	5.0	20	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 20		ug/L	20	5.0	20	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 20		ug/L	20	10	20	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 20		ug/L	20	5.0	20	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 20		ug/L	20	5.0	20	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 12		ug/L	12	5.0	20	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 20		ug/L	20	5.0	20	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 20		ug/L	20	5.0	20	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 20		ug/L	20	5.0	20	"	"	"	"	"	
591-78-6	2-Hexanone	< 50		ug/L	50	50	20	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 50		ug/L	50	50	20	"	"	"	"	"	
67-64-1	Acetone	< 50		ug/L	50	50	20	"	"	"	"	"	
71-43-2	Benzene	< 14		ug/L	14	5.0	20	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 20		ug/L	20	5.0	20	"	"	"	"	"	
75-25-2	Bromoform	< 20		ug/L	20	5.0	20	"	"	"	"	"	
74-83-9	Bromomethane	< 20		ug/L	20	5.0	20	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 20		ug/L	20	5.0	20	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 20		ug/L	20	5.0	20	"	"	"	"	"	
108-90-7	Chlorobenzene	< 20		ug/L	20	5.0	20	"	"	"	"	"	
75-00-3	Chloroethane	< 20		ug/L	20	5.0	20	"	"	"	"	"	
67-66-3	Chloroform	< 20		ug/L	20	5.0	20	"	"	"	"	"	
74-87-3	Chloromethane	< 20		ug/L	20	5.0	20	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 8.0		ug/L	8.0	5.0	20	"	"	"	"	"	
110-82-7	Cyclohexane	< 20		ug/L	20	10	20	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 20		ug/L	20	5.0	20	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 20		ug/L	20	5.0	20	"	"	"	"	"	
100-41-4	Ethylbenzene	< 20		ug/L	20	5.0	20	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 20		ug/L	20	5.0	20	"	"	"	"	"	
78-93-3	Methyl ethyl ketone	< 50		ug/L	50	50	20	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	**9.9**	J.	ug/L	20	5.0	20	"	"	"	"	"	
79-20-9	Methylacetate	< 100		ug/L	100	50	20	"	"	"	"	"	
108-87-2	Methylcyclohexane	< 20		ug/L	20	10	20	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Influent SC52919-01	[none]	Ground Water	02-Jan-19 13:00	03-Jan-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
75-09-2	Methylene chloride	< 60		ug/L	60	20	20	SW8260C	02-Jan-19 13:00	04-Jan-19 14:31	11301	462312A	
100-42-5	Styrene	< 20		ug/L	20	5.0	20	"	"	"	"	"	
108-88-3	Toluene	< 20		ug/L	20	5.0	20	"	"	"	"	"	
1330-20-7	Total Xylenes	< 20		ug/L	20	20	20	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	**10**	J.	ug/L	20	5.0	20	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 8.0		ug/L	8.0	5.0	20	"	"	"	"	"	
79-01-6	Trichloroethene	**300**		ug/L	20	5.0	20	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 20		ug/L	20	5.0	20	"	"	"	"	"	
75-01-4	Vinyl chloride	**210**		ug/L	20	5.0	20	"	"	"	"	"	
Surrogate recoveries:													
2199-69-1	*% 1,2-dichlorobenzene-d4*	*101*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*96*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*101*			*70-130 %*			"	"	"	"	"	
2037-26-5	*% Toluene-d8*	*99*			*70-130 %*			"	"	"	"	"	
Re-analysis of Subcontracted Analyses Prepared by method SW8260C													
156-59-2	cis-1,2-Dichloroethene	**2,700**		ug/L	200	50	200	SW8260C	02-Jan-19 13:00	04-Jan-19 14:07	11301	462312A	
127-18-4	Tetrachloroethene	**2,300**		ug/L	200	50	200	"	"	"	"	"	
Surrogate recoveries:													
2199-69-1	*% 1,2-dichlorobenzene-d4*	*101*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*97*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*105*			*70-130 %*			"	"	"	"	"	
2037-26-5	*% Toluene-d8*	*98*			*70-130 %*			"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Effluent SC52919-02	[none]	Ground Water	02-Jan-19 13:00	03-Jan-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
General Chemistry Parameters													
	pH	**8.26**	pH	pH Units			1	ASTM D 1293-99B	03-Jan-19 12:00	03-Jan-19 18:37	BD	1900017	
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
	Hardness (CaCO3)	**512**		mg/L	0.1		1	E200.7	02-Jan-19 13:00	04-Jan-19 13:17	11301	'[none]'	
Subcontracted Analyses Prepared by method SW8260C													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
71-55-6	1,1,1-Trichloroethane	< 1.0		ug/L	1.0	0.25	1	SW8260C	"	03-Jan-19 19:44	11301	462106A	
79-34-5	1,1,2,2-Tetrachloroethane	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
79-00-5	1,1,2-Trichloroethane	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
75-35-4	1,1-Dichloroethene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
120-82-1	1,2,4-Trichlorobenzene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
96-12-8	1,2-Dibromo-3-chloropropane	< 1.0		ug/L	1.0	0.50	1	"	"	"	"	"	
106-93-4	1,2-Dibromoethane	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
95-50-1	1,2-Dichlorobenzene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 0.60		ug/L	0.60	0.25	1	"	"	"	"	"	
78-87-5	1,2-Dichloropropane	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
541-73-1	1,3-Dichlorobenzene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
591-78-6	2-Hexanone	< 2.5		ug/L	2.5	2.5	1	"	"	"	"	"	
108-10-1	4-Methyl-2-pentanone	< 2.5		ug/L	2.5	2.5	1	"	"	"	"	"	
67-64-1	Acetone	**4.5**	S	ug/L	2.5	2.5	1	"	"	"	"	"	
71-43-2	Benzene	< 0.70		ug/L	0.70	0.25	1	"	"	"	"	"	
75-27-4	Bromodichloromethane	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
75-25-2	Bromoform	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
74-83-9	Bromomethane	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
75-15-0	Carbon Disulfide	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
56-23-5	Carbon tetrachloride	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
108-90-7	Chlorobenzene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
75-00-3	Chloroethane	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
67-66-3	Chloroform	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
74-87-3	Chloromethane	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
156-59-2	cis-1,2-Dichloroethene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
10061-01-5	cis-1,3-Dichloropropene	< 0.40		ug/L	0.40	0.25	1	"	"	"	"	"	
110-82-7	Cyclohexane	< 1.0		ug/L	1.0	0.50	1	"	"	"	"	"	
124-48-1	Dibromochloromethane	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
75-71-8	Dichlorodifluoromethane	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
100-41-4	Ethylbenzene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
98-82-8	Isopropylbenzene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
78-93-3	Methyl ethyl ketone	< 2.5		ug/L	2.5	2.5	1	"	"	"	"	"	
1634-04-4	Methyl t-butyl ether (MTBE)	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
79-20-9	Methylacetate	< 5.0		ug/L	5.0	2.5	1	"	"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Effluent SC52919-02	[none]	Ground Water	02-Jan-19 13:00	03-Jan-19

CAS No.	Analyte(s)	Result	Flag	Units	*RDL	MDL	Dilution	Method Ref.	Prepared	Analyzed	Analyst	Batch	Cert.
Subcontracted Analyses													
Subcontracted Analyses													
*Analysis performed by Phoenix Environmental Labs, Inc. * - CT007*													
108-87-2	Methylcyclohexane	< 1.0		ug/L	1.0	0.50	1	SW8260C	02-Jan-19 13:00	03-Jan-19 19:44	11301	462106A	
75-09-2	Methylene chloride	< 3.0		ug/L	3.0	1.0	1	"	"	"	"	"	
100-42-5	Styrene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
127-18-4	Tetrachloroethene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
108-88-3	Toluene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
1330-20-7	Total Xylenes	< 1.0		ug/L	1.0	1.0	1	"	"	"	"	"	
156-60-5	trans-1,2-Dichloroethene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
10061-02-6	trans-1,3-Dichloropropene	< 0.40		ug/L	0.40	0.25	1	"	"	"	"	"	
79-01-6	Trichloroethene	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
76-13-1	Trichlorotrifluoroethane	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
75-01-4	Vinyl chloride	< 1.0		ug/L	1.0	0.25	1	"	"	"	"	"	
Surrogate recoveries:													
2199-69-1	*% 1,2-dichlorobenzene-d4*	*109*			*70-130 %*			"	"	"	"	"	
460-00-4	*% Bromofluorobenzene*	*88*			*70-130 %*			"	"	"	"	"	
1868-53-7	*% Dibromofluoromethane*	*109*			*70-130 %*			"	"	"	"	"	
2037-26-5	*% Toluene-d8*	*91*			*70-130 %*			"	"	"	"	"	

SC 52919

eurofins | Spectrum Analytical

CHAIN OF CUSTODY RECORD

Page 1 of 1

Special Handling:

- [x] Standard TAT - 7 to 10 business days
- [ ] Rush TAT - Date Needed: ______

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

Report To: E&E, Inc
368 Pleasantview Dr
Lancaster, NY 14086
Telephone #: (716) 684-8060
Project Mgr: Mary Kate Mooney

Invoice To: E&E, Inc
P.O No.: ______ Quote #: ______

Project No: ______
Site Name: Mr Cs OM&M
Location: East Aurora State: NY
Sampler(s): R. Allen

F=Field Filtered 1=$Na_2S_2O_3$ 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=Ascorbic Acid
7=CH3OH 8=$NaHSO_4$ 9=Deionized Water 10=H_3PO_4 11=______ 12=______

DW=Drinking Water GW=Groundwater SW=Surface Water WW=Waste Water
O=Oil SO=Soil SL=Sludge A=Indoor/Ambient Air SG=Soil Gas
X1=______ X2=______ X3=______

G= Grab C=Compsite

List Preservative Code below: — 4 2

Lab ID:	Sample ID:	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	pH	Hardness	VOCs	Check if chlorinated
52919-01	INFLUENT	1/2/2019	1:00P	G	GW				1	✓			☐
↓	INFLUENT	↓	↓	G	GW				1		✓		☐
↓	INFLUENT	↓	↓	G	GW	3						✓	☐
-02	EFFLUENT	↓	↓	G	GW				1	✓			☐
↓	EFFLUENT	↓	↓	G	GW				1		✓		☐
↓	EFFLUENT	↓	↓	G	GW	3						✓	☐
-03	HCL TB	↓	↓	G	W	2						✓	☐
													☐
													☐
													☐

QA/QC Reporting Notes:
* additional charges may appply

MA DEP MCP CAM Report? ☐ Yes ☒ No
CT DPH RCP Report? ☐ Yes ☒ No
☒ Standard ☐ No QC
☐ DQA*
☒ ASP A* ☐ ASP B*
☐ NJ Reduced* ☐ NJ Full*
☐ Tier II* ☐ Tier IV*
☐ Other: ______
State-specific reporting standards:

Please send another sample kit.

Do not send smallest coolers.

Relinquished by:	Received by:	Date:	Time:	Temp °C
Richard C Allen Jr				Observed 5.6
FedEx	[signature]	1/3/19	1017	Correction Factor 0
				Corrected 5.6
				IR ID # 01

☒ EDD format: PDF
☒ E-mail to: mmooneye@ene.com

Condition upon receipt: Custody Seals: ☐ Present ☐ Intact ☐ Broken
☐ Ambient ☐ Iced ☐ Refrigerated ☐ DI VOA Frozen ☐ Soil Jar Frozen

Attachment B
IEG Summary of Field Activities
December 2018

12/05/2018
12/10/2018
12/24/2018
12/31/2018

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 5-Dec-18 *ACTIVITIES:* Site Inspection

INSPECTION PERSONNEL: R. Allen *OTHER PERSONNEL:* ----------

WEATHER CONDITIONS: Cloudy, cold *OUTSIDE TEMPERATURE (°F):* 30

ARE WELL PUMPS OPERATING IN AUTO: YES: NO: √ If "NO", provide explanation below

RW-1, PW-2 and PW-3 are manually set to OFF position; PW-4 through PW-8 are in AUTO

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON: √	OFF:	14	ft	PW-5	ON:	OFF: √	7	ft
PW-2	ON:	OFF: √	11	ft	PW-6	ON:	OFF: √	5	ft
PW-3	ON: √	OFF:	12	ft	PW-7	ON:	OFF: √	7	ft
PW-4	ON:	OFF: √	4	ft	PW-8	ON:	OFF: √	4	ft

EQUALIZATION TANK: 4 ft Last Alarm D/T/Condition: 9/21/2018 Air Stripper Low Pressure

NOTES:

INFLUENT FLOW RATE: 20 gpm INFLUENT TOTALIZER READING: 16761701 gallons

SEQUESTERING AGENT DRUM LEVEL: 16 inches *(x 1.7=)* *AMOUNT OF AGENT REMAINING:* 27 gallons

SEQUESTERING AGENT FEED RATE: ----- ml/min *METERING PUMP PRESSURE:* ----- psi

		Top	Bottom			Top	Bottom	
BAG FILTER PRESSURES:	LEFT:	0	0	psi	RIGHT:	8	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 *INFLUENT PUMP PRESSURE:* 7 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 *AIR STRIPPER PRESSURE:* 21 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O *DISCHARGE PRESSURE:* 9.8 in. H_2O

AIR FLOW : 1550 fpm X 1.4 = 2170 CFM *AIR SPARGER* *LEFT* 6.3 *RIGHT* 2.8 CFM

AIR TEMP: 87.7 °F

EFFLUENT PUMP IN USE: #1 √ #2 *EFFLUENT FEED PUMP PRESSURE:* 4 psi

EFFLUENT FLOW RATE: 86 gpm *EFFLUENT TOTALIZER READING:* 84,493,856 | 157350 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: *INSIDE TEMPERATURE (°F):* 65

IS SUMP PUMP IN USE: YES: √ NO: *ARE ANY LEAKS PRESENT?* YES: NO: √

WATER LEVEL IN SUMP: 6.0 in. *TREATMENT BUILDING CLEAN & ORGANIZED?* YES: √ NO:

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

5-Dec-18

SAMPLES COLLECTED? **YES:** _____ **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: ? **YES:** _____ **NO:** √

WERE MANHOLES INSPECTED? **YES:** √ **NO:** _____

WERE ELECTRICAL BOXES INSPECTED? **YES:** √ **NO:** _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? **YES:** _____ **NO:** √

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: 1.4 **in. WC** (Fan Inlet) — west: _____ east: _____ ***NOTES:*** cfm = 0.05 x fpm (3" PVC)

FLOW (fpm): _____ _____

CONDENSATE 2.0 **gallon** **FLOW (cfm):** _____ _____

DRAINED Yes **VACUUM GAUGE (in WC)** _____ _____

OTHER LOCATIONS

586 Building SVE CONDENSATE drained: **YES**___ VOLUME: 2.0 gallon

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks:

Other Actions: Turned ON electric heater near sump box.

Changed Bag Filters.

Shoveled snow in front of Treatment Room.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 10-Dec-18 *ACTIVITIES:* Site Inspection

INSPECTION PERSONNEL: R. Allen *OTHER PERSONNEL:* ----------

WEATHER CONDITIONS: Cloudy, cold *OUTSIDE TEMPERATURE (°F):* 30

ARE WELL PUMPS OPERATING IN AUTO: YES: NO: √ If "NO", provide explanation below

RW-1, PW-2 and PW-3 are manually set to OFF position; PW-4 through PW-8 are in AUTO

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON: √	OFF:	14	ft	PW-5	ON:	OFF: √	3	ft
PW-2	ON:	OFF: √	10	ft	PW-6	ON:	OFF: √	5	ft
PW-3	ON: √	OFF:	12	ft	PW-7	ON:	OFF: √	7	ft
PW-4	ON: √	OFF:	6	ft	PW-8	ON: √	OFF:	6	ft

EQUALIZATION TANK: 3 ft Last Alarm D/T/Condition: 9/21/2018 Air Stripper Low Pressure

NOTES:

INFLUENT FLOW RATE: 21 gpm INFLUENT TOTALIZER READING: 16794276 gallons

SEQUESTERING AGENT DRUM LEVEL: 12 inches *(x 1.7=)* *AMOUNT OF AGENT REMAINING:* 21 gallons

SEQUESTERING AGENT FEED RATE: ----- ml/min *METERING PUMP PRESSURE:* ----- psi

		Top	Bottom			Top	Bottom	
BAG FILTER PRESSURES:	LEFT:	0	0	psi	RIGHT:	6	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 *INFLUENT PUMP PRESSURE:* 7 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 *AIR STRIPPER PRESSURE:* 22 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O *DISCHARGE PRESSURE:* 9.7 in. H_2O

AIR FLOW : 1400 fpm X 1.4 = 1960 CFM *AIR SPARGER* *LEFT* 6.0 *RIGHT* 2.6 CFM

AIR TEMP: 86.3 °F

EFFLUENT PUMP IN USE: #1 √ #2 *EFFLUENT FEED PUMP PRESSURE:* 4 psi

EFFLUENT FLOW RATE: 88 gpm *EFFLUENT TOTALIZER READING:* 84,516,349 | 179840 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: *INSIDE TEMPERATURE (°F):* 64

IS SUMP PUMP IN USE: YES: √ NO: *ARE ANY LEAKS PRESENT?* YES: NO: √

WATER LEVEL IN SUMP: 7.0 in. *TREATMENT BUILDING CLEAN & ORGANIZED?* YES: √ NO:

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

10-Dec-18

SAMPLES COLLECTED? **YES:** ____ **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: ? **YES:** ____ **NO:** √

WERE MANHOLES INSPECTED? **YES:** √ **NO:** ____

WERE ELECTRICAL BOXES INSPECTED? **YES:** √ **NO:** ____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? **YES:** ____ **NO:** √

If yes, provide manhole/electric box ID and description of any corrective measures below:

RW-1 inner ring is corroded. Most of te MWs and UEs are covered with ice or snow.

SUBSLAB SYSTEMS

TREATMENT ROOM

MANOMETER:	**1.4**	**in. WC**		west	east	***NOTES:*** cfm = 0.05 x fpm (3" PVC)
(Fan Inlet)			**FLOW (fpm):**	1100	400	
CONDENSATE	**1.5**	**gallon**	**FLOW (cfm):**	55	20	
DRAINED	**Yes**	**VACUUM GAUGE (in WC)**				

OTHER LOCATIONS

586 Building SVE CONDENSATE drained: **YES**___ VOLUME: **2.0** gallon

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks:

Other Actions: Turned on Oil Electric Heater near Jesco Pump.

Property Optics installed landscape lighting on 586 Building. One of the lights is above the overhead door of the Treatment Room.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 24-Dec-18 *ACTIVITIES:* Site Inspection

INSPECTION PERSONNEL: R. Allen *OTHER PERSONNEL:* ----------

WEATHER CONDITIONS: Cloudy, snow, cool *OUTSIDE TEMPERATURE (°F):* 33

ARE WELL PUMPS OPERATING IN AUTO: YES: NO: √ If "NO", provide explanation below

RW-1, PW-2 and PW-3 are manually set to OFF position; PW-4 through PW-8 are in AUTO

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON: √	OFF:	14	ft	PW-5	ON:	OFF: √	7	ft
PW-2	ON:	OFF: √	10	ft	PW-6	ON:	OFF: √	6	ft
PW-3	ON: √	OFF:	12	ft	PW-7	ON:	OFF: √	4	ft
PW-4	ON:	OFF: √	6	ft	PW-8	ON:	OFF: √	4	ft

EQUALIZATION TANK: 4 ft Last Alarm D/T/Condition: 9/21/2018 Air Stripper Low Pressure

NOTES:

INFLUENT FLOW RATE: 10 gpm INFLUENT TOTALIZER READING: 16882288 gallons

SEQUESTERING AGENT DRUM LEVEL: 29 inches *(x 1.7=)* *AMOUNT OF AGENT REMAINING:* 49 gallons

SEQUESTERING AGENT FEED RATE: ----- ml/min *METERING PUMP PRESSURE:* ----- psi

		Top	Bottom			Top	Bottom	
BAG FILTER PRESSURES:	LEFT:	0	0	psi	RIGHT:	8	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 *INFLUENT PUMP PRESSURE:* 7 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 *AIR STRIPPER PRESSURE:* 21 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O *DISCHARGE PRESSURE:* 9.7 in. H_2O

AIR FLOW : 1375 fpm X 1.4 = 1925 CFM *AIR SPARGER* *LEFT* 5.8 *RIGHT* 2.4 CFM

AIR TEMP: 79 °F

EFFLUENT PUMP IN USE: #1 √ #2 *EFFLUENT FEED PUMP PRESSURE:* 4 psi

EFFLUENT FLOW RATE: 86 gpm *EFFLUENT TOTALIZER READING:* 84,575,627 | 239120 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: *INSIDE TEMPERATURE (°F):* 60

IS SUMP PUMP IN USE: YES: √ NO: *ARE ANY LEAKS PRESENT?* YES: NO: √

WATER LEVEL IN SUMP: 7.0 in. *TREATMENT BUILDING CLEAN & ORGANIZED?* YES: √ NO:

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

24-Dec-18

SAMPLES COLLECTED? **YES:** _____ **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: ? **YES:** _____ **NO:** √

WERE MANHOLES INSPECTED? **YES:** √ **NO:** _____

WERE ELECTRICAL BOXES INSPECTED? **YES:** √ **NO:** _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? **YES:** _____ **NO:** √

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** (Fan Inlet)

CONDENSATE DRAINED 2.0 **gallon** Yes

	west	east
FLOW (fpm):		
FLOW (cfm):		
VACUUM GAUGE (in WC)		

NOTES: cfm = 0.05 x fpm (3" PVC)

OTHER LOCATIONS

586 Building SVE CONDENSATE drained: **YES**___ VOLUME: **2.0** gallon

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks:

Other Actions: Shoveled snow in front of Treatment Room doors.

Drained Air Stripper Discharge Pressure Gauge line.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

MR. C's DRY CLEANERS SITE
NYSDEC Site #9-15-157
OM&M: SITE INSPECTION FORM

DATE: 31-Dec-18 **ACTIVITIES:** Site Inspection

INSPECTION PERSONNEL: R. Allen **OTHER PERSONNEL:** ----------

WEATHER CONDITIONS: Cloudy, cool **OUTSIDE TEMPERATURE (°F):** 40

ARE WELL PUMPS OPERATING IN AUTO: YES: NO: √ If "NO", provide explanation below

RW-1, PW-2 and PW-3 are manually set to OFF position; PW-4 through PW-8 are in AUTO

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON: √	OFF:	14	ft	PW-5	ON:	OFF: √	6	ft
PW-2	ON:	OFF: √	10	ft	PW-6	ON:	OFF: √	7	ft
PW-3	ON: √	OFF:	12	ft	PW-7	ON:	OFF: √	6	ft
PW-4	ON:	OFF: √	3	ft	PW-8	ON:	OFF: √	3	ft

EQUALIZATION TANK: 4 ft **Last Alarm D/T/Condition:** 9/21/2018 Air Stripper Low Pressure

NOTES:

INFLUENT FLOW RATE: 22 gpm **INFLUENT TOTALIZER READING:** 16926784 gallons

SEQUESTERING AGENT DRUM LEVEL: 24 inches *(x 1.7=)* **AMOUNT OF AGENT REMAINING:** 41 gallons

SEQUESTERING AGENT FEED RATE: ----- ml/min **METERING PUMP PRESSURE:** ----- psi

		Top	Bottom			Top	Bottom	
BAG FILTER PRESSURES:	LEFT:	0	0	psi	RIGHT:	8	0	psi

INFLUENT FEED PUMP IN USE: #1 √ #2 **INFLUENT PUMP PRESSURE:** 7 psi

AIR STRIPPER BLOWER IN USE: #1 √ #2 **AIR STRIPPER PRESSURE:** 25 in. H_2O

AIR STRIPPER DIFFERENTIAL PRESSURE: broken in. H_2O **DISCHARGE PRESSURE:** 9.8 in. H_2O

AIR FLOW : 1300 fpm X 1.4 = 1820 CFM **AIR SPARGER** LEFT 5.8 RIGHT 2.4 CFM

AIR TEMP: 82 °F

EFFLUENT PUMP IN USE: #1 √ #2 **EFFLUENT FEED PUMP PRESSURE:** 4 psi

EFFLUENT FLOW RATE: 84 gpm **EFFLUENT TOTALIZER READING:** 84,606,759 | 270150 gallons

ARE BUILDING HEATERS IN USE? YES: √ NO: **INSIDE TEMPERATURE (°F):** 61

IS SUMP PUMP IN USE: YES: √ NO: **ARE ANY LEAKS PRESENT?** YES: NO: √

WATER LEVEL IN SUMP: 6.0 in. **TREATMENT BUILDING CLEAN & ORGANIZED?** YES: √ NO:

MR. C's DRY CLEANERS SITE
NYSDEC Site #90150157
SITE INSPECTION FORM

31-Dec-18

SAMPLES COLLECTED? **YES:** √ **NO:** _____ Sampled on Jan 1, 2019

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:	INF	1:00 pm	8.2		10.5	2218
AIR STRIPPER EFFLUENT:	EFF	1:00 pm	9.3		11.6	2332

IS THERE EVIDENCE OF TAMPERING/VANDALISM OF WELLS: ? **YES:** _____ **NO:** √

WERE MANHOLES INSPECTED? **YES:** √ **NO:** _____

WERE ELECTRICAL BOXES INSPECTED? **YES:** √ **NO:** _____

IS WATER PRESENT IN ANY MANHOLES OR ELECTRICAL BOXES? **YES:** √ **NO:** _____

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)

(Fan Inlet) **FLOW (fpm):** _____ _____

CONDENSATE **1.0** **gallon** **FLOW (cfm):** _____ _____

DRAINED **Yes** **VACUUM GAUGE (in WC)** _____

OTHER LOCATIONS

586 Building SVE CONDENSATE drained: **YES**___ VOLUME: **2.0** gallon

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON MR. C's SITE

Remarks:

Other Actions: Respond to wind storm on Jan 1. Reset Alarm on Air Stripper Control Panel. Reset AutoDialer Code 03.

Swept up spruce cones and needles from Library Parking Lot near well groups PW-6 and PW-7.

AGWAY

Remarks: Site is empty of materials and has been graded and graveled.

Other Actions:

Attachment C
Summary of Site Utility Costs and Projections
January to December 2018

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs
NYSDEC Work Assignment #10C3074.0011.11
12 Months of System Operation and Maintenance
December 2018 Report

ATTACHMENT C

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-2018	Feb-2018	Mar-2018	Apr-2018	May-2018	Jun-2018
New York State E&G	1001-0310-422	EN-003229-0001-03TTO	Mr. C's Electric Costs	$ 1,314.70	$ 1,124.10	$ 975.14	$ 1,077.67	$ 1,378.14	$ 1,207.50
New York State E&G	76-311-11-015900-18								
National Fuel Gas	7160295 10	EN-003229-0001-03TTO	Mr. C's Natural Gas Costs	$ 81.72	$ 62.46	$ 65.75	$ 68.44	$ 38.16	$ 65.63
			Totals	**$ 1,396.42**	**$ 1,186.56**	**$ 1,040.89**	**$ 1,146.11**	**$ 1,416.30**	**$ 1,273.13**

	Jul-2018	Aug-2018	Sep-2018	Oct-2018	Nov-2018	Dec-2018
Mr. C's Electric Costs	$ 1,154.72	$ 1,269.42	$ 1,449.31	$ 925.36	$ 1,101.35	$ 1,422.75
Mr. C's Natural Gas Costs	$ 111.83	$ 21.25	$ -	$ 20.19	$ 63.75	-
Totals	**$ 1,266.55**	**$ 1,290.67**	**$ 1,449.31**	**$ 945.55**	**$ 1,165.10**	**$ 1,422.75**

Electric - Mr. C's **$ 14,400.16**

Natural Gas - Mr. C's **$ 599.18**

Grand Total - NYSE&G/National Fuel Gas Costs To Date **$ 14,999.34**

Notes:

	Overbilled natural gas costs - no charges
	Estimated Reading

Telephone

Utility Provider	Phone #	E&E Cost Center	Location Description	Jan-2018	Feb-2018	Mar-2018	Apr-2018	May-2018	Jun-2018
Granite Telecommunications	866-874-5500	EN-003229-0001-03TTO	Mr. C's Telephone Costs	$ 41.09	$ 41.09	$ 41.09	$ 41.09	$ 41.09	$ 41.09
Account # 01890582				**Jul-2018**	**Aug-2018**	**Sep-2018**	**Oct-2018**	**Nov-2018**	**Dec-2018**
				$ 41.09	$ 41.09	$ 41.09	$ 41.09	$ 41.09	$ 41.09

Verizon Costs to Date - Mr. C's **$ 493.08**

Grand Total All Utilities To Date **$ 15,492.42**

Monthly Average Costs

Mr. C's Electric	$	1,200.01
Mr. C's Gas	$	54.47
Mr. C's Telephone	$	41.09
Average Utility Cost Total	**$**	**1,295.57**
12 Month Estimate	**$**	**15,546.89**

Budget Remaining:		
	Electric:	$10,899.84
	Telephone:	$46.92
	Gas	$520.82
	Total:	$11,467.58