



ecology and environment engineering, p.c.

International Specialists in the Environment

BUFFALO CORPORATE CENTER

368 Pleasant View Drive

Lancaster, New York 14086

Tel: (716) 684-8060, Fax: (716) 684-0844

February 10, 2014

Mr. William Welling, 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 # 9-15-157
January 2014 Operations, Maintenance, and Monitoring Report

Dear Mr. Welling:

Ecology and Environment Engineering, P.C. (EEEPC) is pleased to provide the January 2014 Operations, Maintenance, and Monitoring (OM&M) Report for the Mr. C's Dry Cleaners Site, NYSDEC Site # 9-15-157, located in East Aurora, New York. Copies of bi-monthly inspection reports prepared by EEEPC's subcontractor, Iyer Environmental Group, PLLC (IEG), are provided in Attachment A. Selected pages from the individual analytical data packages prepared by Spectrum Analytical Inc. (SAI), Warwick, Rhode Island are provided as Attachment B. The full analytical reports along with QA/QC information will be retained by EEEPC. A Data Usability Summary Report (DUSR) has been performed on the analytical reporting for January (Attachment C).

In review of the on-site treatment system operations, monitoring and maintenance for January 2014, EEEPC offers the following comments and highlights:

Operational Summary

Mr. C's Site – Remedial Operations Information

- Checklists for system inspections from IEG are provided as Attachment A for 01/09/14, 01/20/14, and 02/04/14. Based on inspection reports prepared by IEG, the remedial treatment system for the period above had a 98.72% operational up-time (Table 1) and the treatment of contaminated groundwater during that period totaling of 257,147 gallons (Table 2) for January 2014.
- On January 27, 2014 (7AM), alarms received that the treatment system shutdown due to an electrical power failure. Electrical panel and stripper control panel reviewed by electrician and restarted at 3PM. Treatment system down for 8 hours and noted in the monthly operational record.
- Difficulties experienced in monitoring water levels with the piezometers due to freezing conditions and deep snow on observation wells. No piezometer monitoring report provided for the January 2014 OM&M report.
- Due to cold temperatures and lack of inactivity the water line for the safety shower service was frozen. IEG provided fan heater to defrost the water service. No damage noted.

- Bag filters were changed during the operational period.
- PW-6 was off during the operation period due to maintenance problems.
- PW-5 and PW-7 were off during the operation period due to injection operation.
- Compliance samples were taken on January 14, 2014 (Attachment B) and the analytical results received on January 21, 2014 from SAI. The results comply with the daily maximum effluent discharge criteria requirements in the site specific SPDES Equivalency Permit (Table 3). Methyl tert-butyl ether was not detected in this month's influent sample. Cis-1,2,-dichloroethene, trichloroethene, and tetrachloroethene were detected at above criteria concentrations in the influent results, but not in the effluent results.
- Acetone was noted in the effluent sample at 12 ug/L (Table 4). The laboratory was requested to review the QA and TICs of the sample results. After review it was noted that the influent was analyzed at a higher detection level (10.0) than the effluent (1.0). Acetone may have been found below the influent detection limit, but could not be reported. Acetone is not a contaminant of concern for the Mr. C's site.
- Upon further review of the 2013 long-term groundwater report and the SVII air testing acetone was found in the water and air matrices.
- The analytical results of the sample revealed the total volatile organic contaminant concentrations of the influent to be 360 µg/L or 360 ppb. Treated effluent has no detectible concentrations for any of the contaminants of concern. The summary of influent and effluent contaminant concentrations for the January 2014 sampling is presented in Table 4.
- The Mr. C's treatment system based on the total monthly flows has effectively removed 0.75 lb. of targeted contaminants from the groundwater below the site in the month of January 2014 and the cleanup effectiveness was 96.67%. The calculations and data for the month are presented in Table 5.
- This month, a Data Usability Summary Report (DUSR) was performed on the laboratory reporting of the influent/effluent results for the Mr. C's site. In summary, no problems were encountered with the analytical data provided by SAI. The DUSR report is provided as Appendix C.

Mr. C's Site – Property Information

- Contact information regarding the property owner and party leasing the Mr. C's building was provided to the NYSDEC. The information provided is as follows: Property owner (586 Main Street) – DelTora LLC – Owner - Mr. Paul Bendrowski – 231-313-1954 (Traverse City, MI) – Local Point of Contact – Bob Kowal - . Property Lease – Intrepid Automotive Partners – Dave Kern – 716-481-5703 (East Aurora, NY).

Agway Site Remedial Information

- Agway SVE shed and ancillary equipment disassembled and removed during December 2013.
- Above ground and below ground piping remaining to be removed in the Spring of 2014.

Subslab Depressurization Systems (SSDS) – First Presbyterian Church and 27 Whaley Ave. sites

- Site inspection of the church facility on February 20, 2013, revealed that the south SSDS unit was shut off. System was switched back on by field staff. EEEPC to review changing of the switch for this fan to provide uninterrupted operations.
- Property owners at 27 Whaley Ave. have not returned our calls for inspection of the SSDS unit. EEEPC will continue to contact to obtain access for inspection.

Status of Bioaugmentation Direct Push Injection Work

- Procurement for obtaining a direct push subcontractor was performed in March 2013. The successful bidder was Nature's Way Environmental, Alden, NY.
- Part 1 of the bio-augmentation direct push injection work was performed by Nature's Way from May 20, through 31, 2013. Part 1 of the program was the injection of the Regensis HRC primer and 3-D Microemulsion. Oversight of the first for program performance and quality assurance of the scope of work was provided by EEEPC.
- The 1st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.
- Pumping Wells PW-5 and PW-7 still remain temporarily turned off due to close proximity to the injection locations of the "pilot" bio-augmentation program.
- Monthly monitoring and analyses to be performed for eight months to evaluate the effectiveness of the "pilot" installation on the groundwater from the local area monitoring wells. Interim status reports to be performed and issued by EEEPC.
- The second phase of the bio-injections (BDI Plus) was completed July 15-19, 2013. It is estimated to take a week to complete.
- The 2nd progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on August 8-9, 2013.
- Status report on the performance of the "pilot" bio-augmentation program was issued to NYSDEC on August 29, 2013. Report evaluated the baseline sampling plus the two rounds of monthly monitoring.
- The monthly status sampling was performed on September 9 & 10, 2013.
- The monthly status sampling was performed on October 22-23, 2013.
- The monthly status sampling was performed on November 20-21, 2013.
- The updated performance report regarding the bioaugmentation work was issued on December 5, 2013.
- December sampling could not be performed due to high snow and freezing weather conditions occurring around the site.
- January performance sampling could not be performed due to high snow and freezing weather conditions occurring around the site. Site conditions will be evaluated for performance sampling in February.

Mr. C's Energy Usage Information

- A copy of the site utility costs from the Mr. C's remedial operations for January through December 2014 are provided as Attachment D. No utility invoices have been received yet for the site in 2014.

Mr. William Welling, Project Manager

February 10, 2014

Page 4 of 4

Soil Vapor Intrusion Investigation Program (Phase 2)

- Field measurements of the basements at 578 Main Street and 572 Main Street for the installation of the SSDS units were performed by EEEPC engineering personnel in July and August. Drawings under internal review for submission to NYSDEC and the installation of SSDS units by the NYSDEC's proposed callout contractor.
- Letters for Phase 2 – SVII issued by NYSDEC on December 18, 2013 to twelve properties around the Mr. C's site. EEEPC will begin contacting the property owners to schedule soil vapor intrusion investigation work and testing.
- Scheduling of SVII Phase 2 field efforts with the property owners was initiated in January 2014. Field surveys and air sampling to be performed in February 2014.

Site Management Plan

- Issued the final Mr. C's SMP to NYSDEC on December 4, 2013.
- EEEPC to review the SMP for site changes or technical issues for revisions in 2014.

If you have questions regarding the January 2014 OM&M report summary, please do not hesitate to contact me at 716-684-8060.

Very Truly Yours,

Ecology and Environment Engineering, P. C.



Michael G. Steffan

Project Manager

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

D. Iyer, IEG – w/attachments

CTF- EN-003229-0001-03TTO

Table 2
Mr. C's Dry Cleaners Site Remediation
Site #9-15-157
Monthly Process Water Volumes

Month	Actual Period	Gallons (Treated Effluent)
Total - Inception to December 2013	9/5/02 - 12/31/13	121,703,098
January 2014 ³	1/9/14 - 2/4/14	257,147
February 2014 ³		0
March 2014 ³		0
April 2014 ³		0
May 2014		0
June 2014		0
July 2014		0
August 2014		0
September 2014		0
October 2014		0
November 2014		0
December 2014		0
Total Gallons Treated in 2014		257,147
Total Gallons Treated To Date:		121,960,245

NOTES:

1. System operated by Tyree Organization Ltd. From 9/02 - 9/03.
2. System operated by O&M Enterprises from 10/03 - 7/07.
3. System operated by IEG PLLC from 7/07 - present.

Table 3
Mr. C's Dry Cleaners Site Remediation
Site #9-15-157
Effluent Discharge Criteria & Analytical Compliance Results

Parameter/Analyte	Daily Maximum ¹	Units	January 21, 2014 - Effluent Analytical Values - Compliance
Flow	N/A	gpd	9,890
Ph	6.0 - 9.0	standard units	8.30
1,1 Dichloroethene	10	µg/L	ND(<1.0)
1,1 Dichloroethane	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 ²	5	µg/L	NA
m, p-Xylene ²	10	µg/L	NA
Total Xylenes	NA	ug/L	ND(<1.0)
Iron, total	600	µg/L	NA ⁹
Aluminum	4,000	µg/L	NA ⁹
Copper	48	µg/L	NA ⁹
Lead	11	µg/L	NA ⁹
Manganese	2,000	µg/L	NA ⁹
Silver	100	µg/L	NA ⁹
Vanadium	28	µg/L	NA ⁹
Zinc	230	µg/L	NA ⁹
Total Dissolved Solids	850	mg/L	NA ⁹
Total Suspended Solids	20	mg/L	NA ⁹
Hardness	N/A	mg/L	540
Cyanide, Free	10	µg/L	NA ⁹

NOTES:

1. "Daily Maximum" excerpted from Attachment E of Addendum 1 to the Construction Contract Documents dated October 2000.
2. Analytical report did not differentiate between o-Xylene and m, p-Xylene. Total Xylene value reported is given in each line.
3. Shaded cells indicate that analytical value exceeds the "Daily Maximum."
4. "ND" indicates that the compound was not detected and lists the practical quantitation limit in parentheses.
5. "NA" indicates that analyses were not performed and data is unavailable.
6. Average flows based on effluent readings January 9th, 2014 through February 4th, 2014. Total gallons: 257,147 divided by 26 operating days.
7. "I" indicates an estimated value below the detection limit.
8. "B" indicates analyte found in the associated blank.
9. Removed from the required analysis list by NYSDEC Region 9 in February 2005.

40 Indicates non-compliance with the NYSDEC effluent discharge requirements
NR Indicates Not Reported by Lab

Table 4
Mr. C's Dry Cleaners Site Remediation
NYSDEC Site #9-15-157
January 2014 VOC Analytical Summary

Compound	Based on the 01/21/14 Effluent Sampling Results				
	Influent Concentration*		Effluent Concentration**		Cleanup Efficiency***
	(ug/L)		(ug/L)		(%)
Acetone	ND (<50)	U	12		NA
Benzene	ND (<10)	U	ND (<1.0)	U	NA
2-Butanone	ND (<50)	U	ND (<5.0)	U	NA
cis-1, 2-Dichloroethene	41		ND (<1.0)	U	100.00%
Chloroform	ND (<10)	U	ND (<1.0)	U	NA
Methylene chloride	ND (<10)	U	ND (<1.0)	U	NA
Methyl tert-butyl ether (MTBE)	ND (<10)	U	ND (<1.0)	U	NA
Tetrachloroethene (PCE)	300.0		ND (<1.0)	U	100.00%
Toluene	ND (<10)	U	ND (<1.0)	U	NA
Trichloroethene (TCE)	19.0		ND (<1.0)	U	100.00%
Carbon Disulfide	ND (<10)	U	ND (<1.0)	U	NA
1,1,2 Trichloro-1,2,2-trifluoroethane	ND (<10)	U	ND (<1.0)	U	NA
Cyclohexane	ND (<10)	U	ND (<1.0)	U	NA
trans-1,2-dichloroethene	ND (<10)	U	ND (<1.0)	U	NA
Chlorobenzene	ND (<10)	U	ND (<1.0)	U	NA
Methylcyclohexane	ND (<10)	U	ND (<1.0)	U	NA
Methyl acetate	ND (<10)	U	ND (<1.0)	U	NA
Total Xylenes	ND (<10)	U	ND (<1.0)	U	NA
• The 1 st progress monitoring sampling of the groundwater wells associated with the "pilot" bioaugmentation program was performed on July 1-2, 2013.	360.0		12.00		96.67%

Notes:

1. "NA" = Not applicable
2. "U" = Compound analyzed, but was not detected. Detection limit in parentheses.
3. "DJ" or "J" indicates an estimated value below the practical quantitation limit but above the method detection limit.
4. Non-detect values are assumed to be equal to zero for calculation of monthly average concentrations.
5. "D" indicates the compound concentration was obtained from a secondary dilution analysis.
6. Acetone was not detected in the influent sample above the MDL but detected in the effluent sample. It is not a contaminant of concern for the Mr. C's site.

* Detection Limits (<10) and (<50)

** Detection Limits (<1) and (<5)

*** Contaminants of Concern only

Table 5
Mr. C's Dry Cleaners Site Remediation
Site #9-15-157
Monthly VOCs Removed From Groundwater

Month	Actual Period	Influent VOCs (µg/L)	Effluent VOCs (µg/L)	VOCs Removed (lbs.)
Total pounds of VOCs removed from inception to December 2013 =				1576.78
January 2014	1/9/14 - 2/4/14	360.0	12.00	0.75
February 2014				0.00
March 2014				0.00
April 2014				0.00
May 2014				0.00
June 2014				0.00
July 2014				0.00
August 2014				0.00
September 2014				0.00
October 2014				0.00
November 2014				0.00
December 2014				0.00
Total pounds of VOCs removed from inception =				1,577.53
Total pounds of VOCs removed in 2014 =				0.75

HISTORICAL NOTES:

1. Calculations are based on monthly water samples and assumes samples are representative of the entire reporting period.
2. Calculations assume that non-detect values = 0 ug/L.
3. Total VOCs summations include estimated "J" values.
4. Calculations are based on effluent totalizer readings.
5. "Influent VOCs" and "Effluent VOCs" values given above is the summation of values for individual compounds given in monthly analytical reports.
6. Treatment system operated by Tyree Organization, Ltd. from 9/02 to 9/03.
7. Treatment system operated by O&M Enterprises from 10/03 to 7/07.
8. Treatment system operated by IEG from 7/07 to present.

CONVERSIONS:

1 pound = 453.5924 grams
1 gallon = 3.785 liters

Based on the Analytical Results from Each Month:

Pounds of VOCs removed calculated by the following formula:

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

Attachment A
IEG Weekly Inspection Reports
January 2014

Including:

01/09/14

01/20/14

02/04/14

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

DATE: 9-Jan-14 ACTIVITIES: Site Inspection

INSPECTION PERSONNEL: R. Allen OTHER PERSONNEL: _____

WEATHER CONDITIONS: Partly cloudy, cold OUTSIDE TEMPERATURE (° F): 25

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

PW-6 is OFF due to maintenance problems.

PW-5 and PW-7 are OFF due to injection operation.

PROVIDE WATER LEVEL READINGS ON CONTROL PANEL

RW-1	ON: <input checked="" type="checkbox"/>	OFF: _____	<u>7</u> ft	PW-5	ON: <input checked="" type="checkbox"/>	OFF: _____	<u>12</u> ft
PW-2	ON: _____	OFF: <input checked="" type="checkbox"/>	<u>5</u> ft	PW-6	ON: _____	OFF: <input checked="" type="checkbox"/>	<u>65507</u> ft
PW-3	ON: _____	OFF: <input checked="" type="checkbox"/>	<u>3</u> ft	PW-7	ON: <input checked="" type="checkbox"/>	OFF: _____	<u>14</u> ft
PW-4	ON: _____	OFF: <input checked="" type="checkbox"/>	<u>6</u> ft	PW-8	ON: _____	OFF: <input checked="" type="checkbox"/>	<u>5</u> ft

EQUALIZATION TANK: 5 ft Last Alarm DTT/Condition: 12/30/13 Air Stripper Influent Overload

NOTES: Air Stripper Differential Pressure Gauge is fluctuating rapidly.

INFLUENT FLOW RATE: 19 gpm INFLUENT TOTALIZER READING 1,701,006.0 gallons

SEQUESTERING AGENT DRUM LEVEL: 7 inches (x 1.7=) AMOUNT OF AGENT REMAINING: 12 gallons

SEQUESTERING AGENT FEED RATE: 4.0 ml/min METERING PUMP PRESSURE: 3.0 psi

		Top	Bottom		Top	Bottom
BAG FILTER PRESSURES:	LEFT:	<u>25 - 0</u>	<u>0</u> psi	RIGHT:	<u>38 - 7</u>	<u>0</u> psi

INFLUENT FEED PUMP IN USE: #1 #2 _____ INFLUENT PUMP PRESSURE: 12 psi

AIR STRIPPER BLOWER IN USE: #1 #2 _____ AIR STRIPPER PRESSURE: 31.0 in. H₂O

AIR STRIPPER DIFFERENTIAL PRESSURE: 0.25 - 0.45 in. H₂O DISCHARGE PRESSURE: 0.4 in. H₂O

EFFLUENT PUMP IN USE: #1 _____ #2 EFFLUENT FEED PUMP PRESSURE: 5.0 psi

EFFLUENT FLOW RATE: 120 gpm EFFLUENT TOTALIZER READING: 73,378,857 907260 gallons

ARE BUILDING HEATERS IN USE? YES: NO: _____ INSIDE TEMPERATURE (° F): 56

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

9-Jan-14

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:

Most MWs and UEs are covered with snow.

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

Remarks: Ball valve near Equalizer Tank has slow leak.

Air Stripper exhaust leaks.

Other Actions: Changed bag filters.

Shoveled snow off of MWs.

AGWAY

SYSTEM VACUUM: _____ in. H ₂ O			AIR PRESSURE: _____ psi		
SP-1: _____	scfm _____	psi _____	SP-5 _____	scfm _____	psi _____
SP-2: _____	scfm _____	psi _____	SP-6 _____	scfm _____	psi _____
SP-3: _____	scfm _____	psi _____	SP-7 _____	scfm _____	psi _____
SP-4: _____	scfm _____	psi _____	SP-8 _____	scfm _____	psi _____

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON AGWAY SITE

Remarks: Electric Panel, SVE pipes, SAS pipes and plywood enclosure remain on site.

Other Actions:

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

DATE: <u>20-Jan-14</u>		ACTIVITIES: <u>Site Inspection</u>													
INSPECTION PERSONNEL: <u>R. Allen</u>		OTHER PERSONNEL: <u>Raj Shah, Ramsey Renovations</u>													
WEATHER CONDITIONS: <u>Snow, cold</u>		OUTSIDE TEMPERATURE (° F): <u>24</u>													
ARE WELL PUMPS OPERATING IN AUTO: YES: <input type="checkbox"/> NO: <input checked="" type="checkbox"/> If "NO", provide explanation below <u>PW-6 is OFF due to maintenance problems.</u> <u>PW-5 and PW-7 are OFF due to injection operation.</u>															
PROVIDE WATER LEVEL READINGS ON CONTROL PANEL															
RW-1	ON: <input type="checkbox"/>	OFF: <input checked="" type="checkbox"/> <u>6</u> ft	PW-5 ON: <input checked="" type="checkbox"/> OFF: <input type="checkbox"/> <u>13</u> ft												
PW-2	ON: <input type="checkbox"/>	OFF: <input checked="" type="checkbox"/> <u>5</u> ft	PW-6 ON: <input type="checkbox"/> OFF: <input checked="" type="checkbox"/> <u>65507</u> ft												
PW-3	ON: <input type="checkbox"/>	OFF: <input checked="" type="checkbox"/> <u>6</u> ft	PW-7 ON: <input checked="" type="checkbox"/> OFF: <input type="checkbox"/> <u>14</u> ft												
PW-4	ON: <input type="checkbox"/>	OFF: <input checked="" type="checkbox"/> <u>7</u> ft	PW-8 ON: <input type="checkbox"/> OFF: <input checked="" type="checkbox"/> <u>4</u> ft												
EQUALIZATION TANK: <u>3</u> ft		Last Alarm D/T/Condition: <u>1/9/14 Air Stripper Low Level</u>													
NOTES: _____															
INFLUENT FLOW RATE: <u>37</u> gpm		INFLUENT TOTALIZER READING <u>1,872,009.0</u> gallons													
SEQUESTERING AGENT DRUM LEVEL: <u>3</u> inches		(x 1.7=) AMOUNT OF AGENT REMAINING: <u>5</u> gallons													
SEQUESTERING AGENT FEED RATE: <u>4.0</u> ml/min		METERING PUMP PRESSURE: <u>4.0</u> psi													
BAG FILTER PRESSURES: <table border="1" style="display:inline-table; border-collapse: collapse;"> <tr> <td></td> <td style="text-align:center">Top</td> <td style="text-align:center">Bottom</td> <td></td> <td style="text-align:center">Top</td> <td style="text-align:center">Bottom</td> </tr> <tr> <td>LEFT:</td> <td><u>20 - 0</u></td> <td><u>0</u> psi</td> <td>RIGHT:</td> <td><u>25 - 0</u></td> <td><u>0</u> psi</td> </tr> </table>					Top	Bottom		Top	Bottom	LEFT:	<u>20 - 0</u>	<u>0</u> psi	RIGHT:	<u>25 - 0</u>	<u>0</u> psi
	Top	Bottom		Top	Bottom										
LEFT:	<u>20 - 0</u>	<u>0</u> psi	RIGHT:	<u>25 - 0</u>	<u>0</u> psi										
INFLUENT FEED PUMP IN USE: #1 <input checked="" type="checkbox"/> #2 <input type="checkbox"/>		INFLUENT PUMP PRESSURE: <u>12</u> psi													
AIR STRIPPER BLOWER IN USE: #1 <input checked="" type="checkbox"/> #2 <input type="checkbox"/>		AIR STRIPPER PRESSURE: <u>32.0</u> in. H ₂ O													
AIR STRIPPER DIFFERENTIAL PRESSURE: <u>0.12</u> in. H ₂ O		DISCHARGE PRESSURE: <u>0.4</u> in. H ₂ O													
EFFLUENT PUMP IN USE: #1 <input type="checkbox"/> #2 <input checked="" type="checkbox"/>		EFFLUENT FEED PUMP PRESSURE: <u>5.0</u> psi													
EFFLUENT FLOW RATE: <u>120</u> gpm		EFFLUENT TOTALIZER READING: <u>73,488,724</u> 17950 gallons													
ARE BUILDING HEATERS IN USE? YES: <input checked="" type="checkbox"/> NO: <input type="checkbox"/>		INSIDE TEMPERATURE (° F): <u>56</u>													
IS SUMP PUMP IN USE: YES: <input checked="" type="checkbox"/> NO: <input type="checkbox"/>		ARE ANY LEAKS PRESENT? YES: <input checked="" type="checkbox"/> NO: <input type="checkbox"/>													
WATER LEVEL IN SUMP: <u>7.0</u> in.		TREATMENT BUILDING CLEAN & ORGANIZED? YES: <input checked="" type="checkbox"/> NO: <input type="checkbox"/>													

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

20-Jan-14

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:

Most MWs and UEs are covered with snow piles.

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

Remarks: Ball valve near Equalizer Tank has slow leak.

Air Stripper exhaust leaks.

Other Actions: Turned Jesco pump up slightly to: Left 2.6; Right 1.6.

Changed bag filters.

Notified IAE, Inc of frozen water supply line in Treatment Room. Ramsey Renovations installed an electric fan heater in the corner where the frozen water line is located.

AGWAY

SYSTEM VACUUM: _____ in. H ₂ O			AIR PRESSURE: _____ psi		
SP-1: _____	scfm _____	psi _____	SP-5 _____	scfm _____	psi _____
SP-2: _____	scfm _____	psi _____	SP-6 _____	scfm _____	psi _____
SP-3: _____	scfm _____	psi _____	SP-7 _____	scfm _____	psi _____
SP-4: _____	scfm _____	psi _____	SP-8 _____	scfm _____	psi _____

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON AGWAY SITE

Remarks: Electric Panel, SVE pipes, SAS pipes and plywood enclosure remain on site.

Other Actions:

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

DATE: <u>4-Feb-14</u>		ACTIVITIES: <u>Site Inspection</u>									
INSPECTION PERSONNEL: <u>R. Allen</u>		OTHER PERSONNEL: _____									
WEATHER CONDITIONS: <u>Partly cloudy, cold</u>		OUTSIDE TEMPERATURE (° F): <u>17</u>									
<p>ARE WELL PUMPS OPERATING IN AUTO: YES: _____ NO: _____ If "NO", provide explanation below</p> <p><u>PW-6 is OFF due to maintenance problems.</u></p> <p><u>PW-5 and PW-7 are OFF due to injection operation.</u></p>											
PROVIDE WATER LEVEL READINGS ON CONTROL PANEL											
RW-1	ON: _____	OFF: <input checked="" type="checkbox"/> <u>8</u> ft	PW-5 ON: <input checked="" type="checkbox"/> OFF: _____ <u>12</u> ft								
PW-2	ON: _____	OFF: <input checked="" type="checkbox"/> <u>7</u> ft	PW-6 ON: _____ OFF: <input checked="" type="checkbox"/> <u>65507</u> ft								
PW-3	ON: _____	OFF: <input checked="" type="checkbox"/> <u>5</u> ft	PW-7 ON: <input checked="" type="checkbox"/> OFF: _____ <u>13</u> ft								
PW-4	ON: _____	OFF: <input checked="" type="checkbox"/> <u>4</u> ft	PW-8 ON: _____ OFF: <input checked="" type="checkbox"/> <u>6</u> ft								
EQUALIZATION TANK: <u>4</u> ft		Last Alarm D/T/Condition: <u>2/3/14 Air Stripper Low Level</u>									
NOTES: _____											
INFLUENT FLOW RATE: <u>38</u> gpm		INFLUENT TOTALIZER READING <u>2,101,509.0</u> gallons									
SEQUESTERING AGENT DRUM LEVEL: <u>33</u> inches		(x 1.7=) AMOUNT OF AGENT REMAINING: <u>56</u> gallons									
SEQUESTERING AGENT FEED RATE: <u>-----</u> ml/min		METERING PUMP PRESSURE: <u>4.0</u> psi									
BAG FILTER PRESSURES:		<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td style="text-align: center;">Top</td><td style="text-align: center;">Bottom</td></tr> <tr><td>LEFT: <u>0</u></td><td><u>0</u> psi</td></tr> </table>	Top	Bottom	LEFT: <u>0</u>	<u>0</u> psi	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr><td style="text-align: center;">Top</td><td style="text-align: center;">Bottom</td></tr> <tr><td>RIGHT: <u>6</u></td><td><u>0</u> psi</td></tr> </table>	Top	Bottom	RIGHT: <u>6</u>	<u>0</u> psi
Top	Bottom										
LEFT: <u>0</u>	<u>0</u> psi										
Top	Bottom										
RIGHT: <u>6</u>	<u>0</u> psi										
INFLUENT FEED PUMP IN USE: #1 <input checked="" type="checkbox"/> #2 _____		INFLUENT PUMP PRESSURE: <u>12</u> psi									
AIR STRIPPER BLOWER IN USE: #1 <input checked="" type="checkbox"/> #2 _____		AIR STRIPPER PRESSURE: <u>32.0</u> in. H ₂ O									
AIR STRIPPER DIFFERENTIAL PRESSURE: <u>0.13</u> in. H ₂ O		DISCHARGE PRESSURE: <u>0.4</u> in. H ₂ O									
EFFLUENT PUMP IN USE: #1 _____ #2 <input checked="" type="checkbox"/>		EFFLUENT FEED PUMP PRESSURE: <u>4.0</u> psi									
EFFLUENT FLOW RATE: <u>120</u> gpm		EFFLUENT TOTALIZER READING: <u>73,636,004</u> 166150 gallons									
ARE BUILDING HEATERS IN USE? YES: <input checked="" type="checkbox"/> NO: _____		INSIDE TEMPERATURE (° F): <u>59</u>									
IS SUMP PUMP IN USE: YES: <input checked="" type="checkbox"/> NO: _____		ARE ANY LEAKS PRESENT? YES: <input checked="" type="checkbox"/> NO: _____									
WATER LEVEL IN SUMP: <u>7.5</u> in.		TREATMENT BUILDING CLEAN & ORGANIZED? YES: <input checked="" type="checkbox"/> NO: _____									

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

4-Feb-14

SAMPLES COLLECTED? YES: NO:

	Sample ID	Time of Sampling	pH	Turbidity	Temp.	Sp. Cond.
AIR STRIPPER INFLUENT:	INF	1:00 PM	7.69	6.40	11.1	1935
AIR STRIPPER EFFLUENT:	EFF	1:00 PM	8.52	6.20	11.1	2222

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:

Most MWs and UEs are covered with snow piles.

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

Remarks: Sysytem shutdown at 7 am on 1/27 due to electrical power failure with multiple alarms from autodialer;
 Worked with Ramsey on 1/27 to fix Electric Panel, and with Rex Caroll to fix Air Stripper Control Panel.
 Restarted system by 3 pm on 1/27
 Ball valve near Equalizer Tank has slow leak; Air Stripper exhaust leaks; Redux line has a leak.

Other Actions: Turned Jesco pump up slightly to: Left 3.0; Right 2.0.; Changed bag filters.
 Took delivery of (1) overpack drum from AWS, Inc.;

AGWAY

SYSTEM VACUUM: _____ in. H ₂ O			AIR PRESSURE: _____ psi		
SP-1: _____	scfm _____	psi _____	SP-5 _____	scfm _____	psi _____
SP-2: _____	scfm _____	psi _____	SP-6 _____	scfm _____	psi _____
SP-3: _____	scfm _____	psi _____	SP-7 _____	scfm _____	psi _____
SP-4: _____	scfm _____	psi _____	SP-8 _____	scfm _____	psi _____

INCLUDE REMARKS & DESCRIBE ANY OTHER SYSTEM MAINTENANCE PERFORMED ON AGWAY SITE

Remarks: Electric Panel, SVE pipes, SAS pipes and plywood enclosure remain on site.

Other Actions:

Mr. C's CLEANERS OM&M

SUMMARY OF FIELD ACTIVITIES BY IEG - 1/2014

DATE	ACTIVITY
2-Jan	Shovel snow, empty drip buckets, pour decanted water into sump and turn ON electric heater.
9-Jan	OM&M Weekly Inspection. UM office work.
10-Jan	Change bag filters. Shovel snow off of MWs.
11-Jan	UB office work
13-Jan	Piezometer Readings and OM&M Weekly Inspection.
14-Jan	OM&M office work. Deliver equipment. Sampling.
20-Jan	OM&M Weekly Inspection. UM office work.
23-Jan	Seal Sludge drum #1 with concrete. Change bag filters. Shovel snow. Work with Ramsey to thaw frozen water line.
24-Jan	Empty drip buckets and inspect water line.
27-Jan	Respond to multiple alarms from AutoDialer on 1/27 at 7 am; system shut down due to electrical power failure; worked with Ramsey to fix electric Panel; worked with Caroll Plumbing to fix Air Stripper Control Panel; system restarted by 3 pm on 1/27.
28-Jan	OM&M Weekly Inspection. Order supplies.
29-Jan	Get supplies
30-Jan	Take delivery of overpack drum from AWS, Inc. Record fuze information.

Mr. C's CLEANERS OM&M
STATUS OF FIELD ACTIVITIES BY IEG - 1/2014

ACTIVITY	DESCRIPTION	COMPLETION DATE/STATUS
Water Supply Line stopped	Water Supply Line stopped working in Treatment Room probably because of the very cold weather which may have frozen a line. Work with building maintenance personnel to restore water.	Jan-14
System Goes Offline	System stops working and several contactors are tripped. Replace fuze in outside electric panel and one contactor in the Air Stripper Control Panel.	Jan-14
PW-4 UE Level	Asphalt around Underground Enclosure has sunk, leaving it vulnerable to damage. Bring parking lot up to level with asphalt patch.	in progress
Rebuild JAC Pump as needed	Jesco America Corp recommends rebuilding the Redux pump when needed. Purchased rebuild kit.	in progress
Brace Effluent Pipe	David Szymanski (NYSDEC) inspected Treatment Room and said that the effluent pipe should be braced in (3) places to the north wall.	in progress
Inspect and clean Manholes	Inspect manholes near operating pumps. Pump out water in manholes and clean out remaining sediment and other material.	in progress
Trim Broken Piezometers	Many of the piezometers are broken. Measuring water levels is not precise when a pipe is broken. Identify and trim all broken piezometers.	in progress
Cool Treatment Room	Temperature in Treatment Room is well above 90 degrees during the summer months. Need to increase outside air inflow to the room.	in progress
Replace Air Stripper Exhaust	Present Air Stripper exhaust is very heavy and leaks moisture. Replace with lighter system.	in progress
Demobilize Agway Shed	Remove all equipment from shed and deliver to owner/recycle/dispose as needed; dismantle electrical installations; disassemble/remove shed structure/base.	in progress
PW-7 pitless adapter	Pitless adapter does not seal well. Repair or replacer pitless adapter	in progress
PW-8 pitless adapter	Pitless adapter feels broken/does not seal well. Repair/replace pitless adapter	in progress
Blower #2 makes loud noise	Fan seems to have slipped off of the motor shaft. Disassemble, inspect and repair.	in progress
PW-6 pumping into itself	Water enters well when well pump is running. Suspect faulty check valve. Test and repair as needed.	in progress
Dispose Open Top Sludge Drum	Plastic 55 gal drum with open top is almost full of sludge. Dispose of drum to free up space in the cramped Treatment Room.	in progress
Dispose used Bag Filters	There are (2) Metal 55 gal drums filled with used bag filters. Dispose of both drums and get new drum to store used bag filters.	in progress
Filter Housings are corroded	Flanges that seal filter baskets inside Rosedale Filter Housings are corroded. Sediment flows around filters instead of being trapped. Replace seals in existing housings (short term). Replace housings (long term).	in progress
Replace Air Stripper Latches	Around (6) latches on the Air Stripper trays are loose or broken. Reattach keepers with JB Weld. Replace broken latches and springs with new parts.	in progress
Repair Leaking Ball Valve	Influent ball valve near EQ Tank drips. Inspect/clean and replace if necessary.	in progress
Install Sub Slab Vapor Extraction System	High levels of VOCs were found under the floor of the Treatment Room. Install a system to remove these vapors and discharge them into the air above the roof.	in progress

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP MAINTENANCE BY IEG - 2014

as of Jan 2014

ID	CLEAN & INSPECT PUMP	REPLACED PUMP	REPAIR PUMP	PITLESS ADAPTER	INNER RING	HORIZONTAL PIPE	CHECK VALVE	CLEAN & INSPECT TRANSDUCER	REPLACE TRANSDUCER	REPAIR TRANSDUCER	PUMP OUT WELL	CLEAN OUT & INSPECT ELECTRICAL BOX	ELECTRICAL BOX REPAIR
RW - 1	Jan 08, May 10, Jan 12	Feb 08, Jan 12	May 10, Nov 08					May 10, Jan 12					
PW - 2	Jun 08, Aug 09, May 10, Apr 13	Jul 08, Apr 13						Nov 11, May 10, Apr 13	Sep 09, Dec 11		Aug-09	Nov-11	Sep-09
PW - 3	Jun 08, Aug 09, May 10	Jul 08, Dec 11		Repair adapter				Aug 09, Nov 11	Dec 11		Aug-09	Nov-11	
PW - 4	Dec 07, May 08, Sep 09, May 10, Jan 12	Dec 07, Jan 12	Sep-13		Aug 13			May 10, Nov 11	Dec 11, Mar 08, Sep 08	Sep-08	Jul 09, Sep 09	Sep 09, Nov 11	Sep-09
PW - 5	Jan 12, May 08	Jul 08, Jan 12						Mar-11	Jan 12, Sep 08	Sep-09		Jan-12	
PW - 6	Jun 08, Jul 09, Jul 12, Nov 12	Jun 08, Jul 09, Aug 12, Nov 12				Jul 12, Nov 12		Aug 09, Jul 12, Dec 12, Apr 13	Sep-09	Jun-08	Aug-09	Aug 09, Sep 09	Jul 09, Sep 09
PW - 7	Jun 08, Jul 09, May 10, Oct 10, Aug 11, Mar 12, Jul 12, Nov 12	Nov 07, Jul 09, Oct 10, Nov 12				Jul 12, Nov 12		Oct 10, Aug 11, Mar 12, Jul 12, Dec 12		Jun-08	Aug 09, May 10, Aug 11		
PW - 8	Jun 08, Aug 09, May 10, Aug 11, Jul 12, Dec 12	Jul 08, Sep 09, Aug 11, Dec 12				Pipe 8/09, Jul 12		May 10, Aug 11, Jul 12, Dec 12, Apr 13			Aug 09, May 10, Aug 11	Apr-13	Apr-13

Mr. C's CLEANERS OM&M

SUMMARY OF WATER PUMP STATUS - 2014

as of Jan 2014

ID	NEEDS CLEANING & INSPECTION	NEEDS NEW PUMP	NEEDS NEW INNER RING	NEEDS P.A. OR PIPE	NEEDS WELL CLEAN-OUT	PITLESS ADAPTER	NEEDS HORIZONTAL LINE PURGE	NEEDS CHECK VALVE INSPECTION	NEEDS TRANSDUCER INSPECTION	NEEDS NEW TRANSDUCER	NEEDS ANEROID BELLOWS	NEEDS U.E. CLEANED	NEEDS U.E. REPAIR
RW-1	DONE 1/12	NO	PZ-1B		YES				NO	NO	NO	NO	YES - bolts
PW-2	NO	NO	NO		YES				NO		NO	NO	YES - bolts
PW-3	NO	NO	NO	REPAIRED 8/09	DONE 8/09				NO		NO	NO	NO
PW-4	DONE 9/13	NO	Replaced 8/13		DONE 9/09				NO		NO	NO	YES - Asphalt patch
PW-5	DONE 1/12	NO	NO		YES				NO	DONE 1/12	DONE 1/12	NO	NO
PW-6	YES	YES	NO	Replaced pipe 8/09	DONE 8/09		NO	YES	NO	NO	DONE 9/09	NO	DONE
PW-7	NO	NO	NO	Replaced pipe 8/09	YES	YES	NO		NO	NO	DONE	NO	NO
PW-8	NO	DONE 8/11	NO	Replaced pipe 8/09	NO	YES	YES		NO	NO	YES	NO	NO

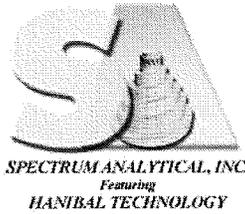
Attachment B
Analytical Report from
Spectrum Analytical Laboratories

Analytical Data Package Work Order ID: N0042

Sampled: January 14, 2014

Received: January 15, 2014

Report Date:
21-Jan-14 14:01



- Final Report
 Re-Issued Report
 Revised Report

Laboratory Report

Ecology and Environment Engineering P.C.
368 Pleasant View Drive
Lancaster, NY 14086

Work Order: N0042
Project : Mr. C's Dry Cleaning
Project #: 4500000623/EN-003229-0001-03TTO

Attn: Michael Steffan

<u>Laboratory ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Sampled</u>	<u>Date Received</u>
N0042-01	INFLUENT	Aqueous	14-Jan-14 12:30	15-Jan-14 11:30
N0042-02	EFFLUENT	Aqueous	14-Jan-14 12:30	15-Jan-14 11:30

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. The results relate only to the samples(s) as received. This report may not be reproduced, except in full, without written approval from Spectrum Analytical.

All applicable NELAC or USEPA CLP requirements have been met.

Spectrum Analytical (Rhode Island) is accredited under the National Environmental Laboratory Approval Program (NELAP) and DoD Environmental Laboratory Accreditation Program (ELAP), holds Organic and Inorganic contracts under the USEPA CLP Program and is certified under several states. The current list of our laboratory approvals and certifications is available on the Certifications page on our web site at www.spectrum-analytical.com.

Please contact the Laboratory or Technical Director at 401-732-3400 with any questions regarding the data contained in the laboratory report.

Department of Defense	N/A
Connecticut	PH-0153
Delaware	N/A
Florida	E87664
Maine	2007037
Massachusetts	M-RI907
New Hampshire	2631
New Jersey	RI001
New York	11522
North Carolina	581
Rhode Island	LAI00301
USDA	P330-08-00023
USEPA - ISM	EP-W-09-039
USEPA - SOM	EP-W-11-033

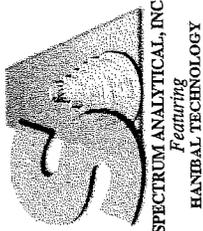


Certificate # L2247 Testing

Authorized by:

Yihai Ding
Laboratory Director

Sample Transmittal Documentation



SIA
SPECTRUM ANALYTICAL, INC.
Featuring
HANBAL TECHNOLOGY

CHAIN OF CUSTODY RECORD

Page 1 of 1
 11 Amgren Drive
 8405 Benjamin Road, Site A
 Agawam, MA 01001
 (413) 789-9018

Special Handling:
 TAT- Ind icate Date Needed: Std
 All TATs subject to laboratory approval.
 Min. 24-hour notification needed for rushes.
 Samples disposed of after 60 days unless otherwise instructed.

Report To: E & E, Inc
368 Pleasantview Dr
Lancaster, NY 14086
 Telephone #: (716) 684-8060
 Project Mgr. Mike Steffan

Invoice To: E & E, Inc
 Project No.: _____
 Site Name: Mr Cs OM & M
 Location: East Aurora State: NY
 Sampler(s): R. Allen
 P.O. No.: _____ RQN: _____

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

1=Na₂S₂O₃ 2=HCl 3=H₂SO₄ 4=HNO₃ 5=NaOH 6=Ascorbic Acid 7=CH₃OH
 8= NaHSO₄ 9= Deionized Water 10=H₃PO₄ 11= _____ 12= _____
 DW=Drinking Water GW=Groundwater WW=Wastewater
 O=Oil SW= Surface Water SO=Soil SL=Sludge A=Air
 X1= _____ X2= _____ X3= _____

List preservative code below:
 - 4 2
 Containers: _____
 Analyses: _____

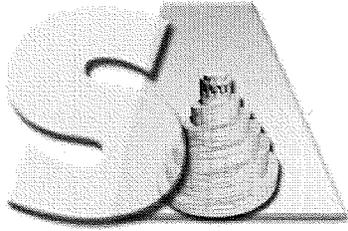
QA/QC Reporting Notes:
 QA/QC Reporting Level
 Level I Level II
 Level III Level IV
 Other CAT A
 State-specific reporting standards: _____

Lab Id.	Sample Id.	Date:	Time:	Type	Matrix	# of VOA Vials	# of Amber Glass	# of Clear Glass	# of Plastic	Temp °C
- 01	INFLUENT	Jan 14 2014	12:30P	G	GW				1	
- 01	INFLUENT	Jan 14 2014		G	GW	3			1	
- 02	EFFLUENT			G	GW				1	
- 02	EFFLUENT			G	GW				1	
- 02	EFFLUENT			G	GW	3			1	

Containers	Analyses	Temp °C
	PH	
	Hardness	
	VOCs	

Relinquished by: Richard C. Allen
 Received by: [Signature]
 Date: 1/15/14 Time: 11:30 Temp °C: 5.6
 EDD Format: PDF
 E-mail to: msteffan@ene.com

Condition upon receipt: Custody Seals: Present Broken
 Ambient Refrigerated DJI VOA Prozen Soil Jar Frozen
JRC
 Revised Feb 2013



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

*** Volatiles ***

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

INFLUENT

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: N0042 Mod. Ref No.: _____ SDG No.: SN0042
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0042-01A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2787.D
 Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2014
 % Moisture: not dec. Date Analyzed: 01/17/2014
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane		10	U
74-87-3	Chloromethane		10	U
75-01-4	Vinyl chloride		10	U
74-83-9	Bromomethane		10	U
75-00-3	Chloroethane		10	U
75-69-4	Trichlorofluoromethane		10	U
75-35-4	1,1-Dichloroethene		10	U
67-64-1	Acetone		50	U
75-15-0	Carbon disulfide		10	U
75-09-2	Methylene chloride		10	U
156-60-5	trans-1,2-Dichloroethene		10	U
1634-04-4	Methyl tert-butyl ether		10	U
75-34-3	1,1-Dichloroethane		10	U
78-93-3	2-Butanone		50	U
156-59-2	cis-1,2-Dichloroethene		41	
67-66-3	Chloroform		10	U
71-55-6	1,1,1-Trichloroethane		10	U
56-23-5	Carbon tetrachloride		10	U
107-06-2	1,2-Dichloroethane		10	U
71-43-2	Benzene		10	U
79-01-6	Trichloroethene		19	
78-87-5	1,2-Dichloropropane		10	U
75-27-4	Bromodichloromethane		10	U
10061-01-5	cis-1,3-Dichloropropene		10	U
108-10-1	4-Methyl-2-pentanone		50	U
108-88-3	Toluene		10	U
10061-02-6	trans-1,3-Dichloropropene		10	U
79-00-5	1,1,2-Trichloroethane		10	U
127-18-4	Tetrachloroethene		300	
591-78-6	2-Hexanone		50	U
124-48-1	Dibromochloromethane		10	U
106-93-4	1,2-Dibromoethane		10	U
108-90-7	Chlorobenzene		10	U
100-41-4	Ethylbenzene		10	U
1330-20-7	Xylene (Total)		10	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
INFLUENT

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: N0042 Mod. Ref No.: _____ SDG No.: SN0042
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0042-01A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2787.D
 Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2014
 % Moisture: not dec. Date Analyzed: 01/17/2014
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
100-42-5	Styrene		10	U
75-25-2	Bromoform		10	U
98-82-8	Isopropylbenzene		10	U
79-34-5	1,1,2,2-Tetrachloroethane		10	U
541-73-1	1,3-Dichlorobenzene		10	U
106-46-7	1,4-Dichlorobenzene		10	U
95-50-1	1,2-Dichlorobenzene		10	U
96-12-8	1,2-Dibromo-3-chloropropane		10	U
120-82-1	1,2,4-Trichlorobenzene		10	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		10	U
110-82-7	Cyclohexane		10	U
79-20-9	Methyl acetate		10	U
108-87-2	Methylcyclohexane		10	U

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
EFFLUENT

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM Case No.: N0042 Mod. Ref No.: _____ SDG No.: SN0042
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0042-02A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2786.D
 Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2014
 % Moisture: not dec. Date Analyzed: 01/17/2014
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 Purge Volume: 5.0 (mL)

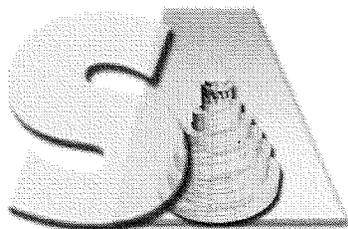
CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
75-71-8	Dichlorodifluoromethane		1.0	U
74-87-3	Chloromethane		1.0	U
75-01-4	Vinyl chloride		1.0	U
74-83-9	Bromomethane		1.0	U
75-00-3	Chloroethane		1.0	U
75-69-4	Trichlorofluoromethane		1.0	U
75-35-4	1,1-Dichloroethene		1.0	U
67-64-1	Acetone		12	
75-15-0	Carbon disulfide		1.0	U
75-09-2	Methylene chloride		1.0	U
156-60-5	trans-1,2-Dichloroethene		1.0	U
1634-04-4	Methyl tert-butyl ether		1.0	U
75-34-3	1,1-Dichloroethane		1.0	U
78-93-3	2-Butanone		5.0	U
156-59-2	cis-1,2-Dichloroethene		1.0	U
67-66-3	Chloroform		1.0	U
71-55-6	1,1,1-Trichloroethane		1.0	U
56-23-5	Carbon tetrachloride		1.0	U
107-06-2	1,2-Dichloroethane		1.0	U
71-43-2	Benzene		1.0	U
79-01-6	Trichloroethene		1.0	U
78-87-5	1,2-Dichloropropane		1.0	U
75-27-4	Bromodichloromethane		1.0	U
10061-01-5	cis-1,3-Dichloropropene		1.0	U
108-10-1	4-Methyl-2-pentanone		5.0	U
108-88-3	Toluene		1.0	U
10061-02-6	trans-1,3-Dichloropropene		1.0	U
79-00-5	1,1,2-Trichloroethane		1.0	U
127-18-4	Tetrachloroethene		1.0	U
591-78-6	2-Hexanone		5.0	U
124-48-1	Dibromochloromethane		1.0	U
106-93-4	1,2-Dibromoethane		1.0	U
108-90-7	Chlorobenzene		1.0	U
100-41-4	Ethylbenzene		1.0	U
1330-20-7	Xylene (Total)		1.0	U

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.
EFFLUENT

Lab Name: SPECTRUM ANALYTICAL, INC. Contract: _____
 Lab Code: MITKEM. Case No.: N0042 Mod. Ref No.: _____ SDG No.: SN0042
 Matrix: (SOIL/SED/WATER) WATER Lab Sample ID: N0042-02A
 Sample wt/vol: 5.00 (g/mL) ML Lab File ID: V8D2786.D
 Level: (TRACE/LOW/MED) LOW Date Received: 01/15/2014
 % Moisture: not dec. Date Analyzed: 01/17/2014
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 Purge Volume: 5.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/L	
100-42-5	Styrene		1.0	U
75-25-2	Bromoform		1.0	U
98-82-8	Isopropylbenzene		1.0	U
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U
541-73-1	1,3-Dichlorobenzene		1.0	U
106-46-7	1,4-Dichlorobenzene		1.0	U
95-50-1	1,2-Dichlorobenzene		1.0	U
96-12-8	1,2-Dibromo-3-chloropropane		1.0	U
120-82-1	1,2,4-Trichlorobenzene		1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane		1.0	U
110-82-7	Cyclohexane		1.0	U
79-20-9	Methyl acetate		1.0	U
108-87-2	Methylcyclohexane		1.0	U



SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

*** Wet Chemistry ***

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

01/17/2014

Client: Ecology and Environment Engineering P.C.

Client Sample ID: INFLUENT

Lab ID: N0042-01

Project: Mr. C's Dry Cleaning

Collection Date: 01/14/14 12:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2340B -- HARDNESS by Calculation							SM2340_W
Hardness, Ca/Mg (As CaCO3)	540		4.0	mg/L CaCO3		101/16/2014 9:36	75596
SM 4500 H+ B -- pH VALUE							SM4500_H+
pH	7.4		1.0	S.U.		101/15/2014 9:34	R79255

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 RL - Reporting Limit

Spectrum Analytical Inc. - North Kingstown RI -- Rhode Island Division

01/17/2014

Client: Ecology and Environment Engineering P.C.
Client Sample ID: EFFLUENT
Lab ID: N0042-02

Project: Mr. C's Dry Cleaning
Collection Date: 01/14/14 12:30

Analyses	Result	Qual	RL	Units	DF	Date Analyzed	Batch ID
SM 2340B -- HARDNESS by Calculation							SM2340_W
Hardness, Ca/Mg (As CaCO3)	540		4.0	mg/L CaCO3		1 01/16/2014 9:40	75596
SM 4500 H+ B -- pH VALUE							SM4500_H+
pH	8.3		1.0	S.U.		1 01/15/2014 9:51	R79255

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 B - Analyte detected in the associated Method Blank
 DF - Dilution Factor

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 E - Value above quantitation range
 RL - Reporting Limit

Last Page of Data Report

Attachment C
Data Usability Summary Report
Spectrum Analytical Report #N0042

Data Usability Summary Report	Project: Mr C's Dry Cleaning:
Date Completed: February 05, 2014	Completed by: Lynne Kalmbach and Marcia Meredith Galloway

The analytical data provided by the laboratory were reviewed for precision, accuracy, and completeness based on applicable sections of the following guidelines.

- NYSDEC Division of Environmental Remediation Guidance for Data Deliverables and the Development of Data Usability Summary Reports (in DER-10, May 2010)
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (EPA-540-R-08-01, June 2008)
- USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (OSWER 9240.1-51, EPA 540-R-10-011, January 2010).
- EPA Region 2 Data Validation SOPs

Specific criteria for QC limits were obtained from the master QAPP. Compliance with the project QA program is indicated in the checklist and tables below. Any major or minor concerns affecting data usability are listed below. The checklist and tables also indicate whether data qualification is required and/or the type of qualifier assigned.

Reference:

ProjectID	Lab Work Order	Laboratory Report
EN-003229-0001-03TTO	N0042	Spectrum Analytical, Inc.

Table 1 – Sample Listing Summary

Work Order	Matrix	Sample ID	Lab ID	Sample Date	Lab QC	MS/MSD	ID Corrections
N0042	AQ	INFLUENT	N0042-01	14 JAN 2014 12:30			
N0042	AQ	EFFLUENT	N0042-02	14 JAN 2014 12:30			

Table 1A – Sample Test Summary

Work Orders	Matrix	Test Method	Method Name	Number of Samples	Sample Type
N0042	AQ	SW846 8260C	Volatile Organic Compounds (GC/MS)	2	N
N0042	AQ	SM2340	Hardness by Calculation	2	N
N0042	AQ	SM4500 H+	pH Value	2	N

General Sample Information

Do Samples and Analyses on COC check against Lab Sample Tracking Form?	Yes.
Did coolers arrive at lab between 2 and 6°C and in good condition as indicated on COC and Cooler Receipt Form?	Yes.
Frequency of Field QC Samples Correct? Field Duplicate - 1/20 samples Trip Blank - Every cooler with VOCs waters only Equipment Blank - 1/ set of samples per day?	No. A trip blank was not provided. MS/MSD and field duplicate were not required. Equipment blank was not required.
Case narrative present and complete?	Yes.
Any holding time violations (See table below)?	No.

Data Usability Summary Report	Project: Mr C's Dry Cleaning:
Date Completed: February 05, 2014	Completed by: Lynne Kalmbach and Marcia Meredith Galloway

The following tables are presented at the end of this DUSR and provide summaries of results outside QC criteria:

- Method Blanks Results (Table 2)
- Surrogates Outside Limits (Table 3)
- MS/MSD Outside Limits (Table 4)
- LCS Outside Limits (Table 5)
- Reanalysis Results (Table 6)
- Field Duplicate Results (Table 7)

Go to [Tables List](#)

Data Usability Summary Report	Project: Mr C's Dry Cleaning:
Date Completed: February 05, 2014	Completed by: Lynne Kalmbach and Marcia Meredith Galloway

Volatile Organics by GC/MS	
Description	Notes and Qualifiers
Any compounds present in method, trip, or, field blanks (see Table 2)?	No.
For samples, if results are < 5 times the blank or < 10 times the blank for common laboratory contaminants, then "U" flag data. Qualification also applies to TICs.	No samples were qualified.
Are surrogates for method blanks and LCS within limits?	Yes.
Are surrogates for samples and MS/MSD within limits? (See Table 3). If not, were all samples reanalyzed for VOCs? Semivolatile samples should reanalyzed if more than one base-neutral and/or more than one acid phase compound for semivolatiles is out. Matrix effects should be established.	Yes.
Is Laboratory QC frequency at least one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Unable to be assessed. Category A report provided.
Is MS/MSD within QC criteria (see Table 4)? If out and LCS is compliant, then "J" flag positive data in original sample due to matrix.	A MS/MSD was not included in the sample set; however, a LCS/LCSD analyzed. Surrogate recoveries were acceptable indicating no matrix issues.
Is LCS within QC criteria (see Table 5)? If out, and the recovery is high with no positive values, then no data qualification is required.	No. See Table 5. Bromomethane and Acetone were recovered above the acceptance criteria in the LCS and/or LCSD. Bromomethane was not detected in the samples; therefore, no qualifications were required. Acetone is a poor performing compound and a common laboratory contaminant. The analyte was detected in the Effluent sample; therefore, the results were J qualified as estimated.
Do internal standards areas and retention time meet criteria? If not was sample re-analyzed to establish matrix (see Table 6)?	Unable to be assessed. Category A report provided.
Is initial calibration for target compounds <15 %RSD or curve fit?	Unable to be assessed. Category A report provided.
Is continuing calibration for target compounds < 20.5%D.	Unable to be assessed. Category A report provided.
Were any samples reanalyzed or diluted (see Table 6)? For any sample reanalysis or dilutions, is only one reportable result flagged?	Yes. See Table 6. The Influent sample was dilute to bring the concentration of analytes within the calibration range. One result was reported.
For TICs are there any system related compounds that should not be reported?	N/A
Do field duplicate results show good precision for all compounds except TICs (see Table 7)?	N/A

Hardness by Calculation and pH Value	
Description	Notes and Qualifiers

Data Usability Summary Report	Project: Mr C's Dry Cleaning:
Date Completed: February 05, 2014	Completed by: Lynne Kalmbach and Marcia Meredith Galloway

Hardness by Calculation and pH Value	
Description	Notes and Qualifiers
Are any compounds present in method and field blanks as noted on Table 2?	No. A blank is not required for pH analysis.
For samples, if results are < 5 times the blank then "U" flag data.	No samples were qualified.
Is laboratory QC frequency one blank and LCS with each batch and one set of MS/MSD per 20 samples?	Unable to be assessed. Category A report provided.
Are MS/MSD within QC criteria (see Table 4)? QC limits are not applicable to sample results greater than 4 times spike amount. All N flagged data for MS are flagged J as estimated.	A MS/MSD was not included in the sample set.
Is LCS within QC criteria (see Table 5)? If out, and the recovery high with no positive values, then no data qualification is required.	Unable to be assessed. Category A report provided.
Is there one serial dilution per 20 samples? Flag all data reported with an "E" as "J".	Unable to be assessed. Category A report provided.
Spot check ICS recoveries 80-120%. Contact lab if unacceptable.	Unable to be assessed. Category A report provided.
Spot check ICV 95-105%. Contact lab if unacceptable.	Unable to be assessed. Category A report provided.
Spot check CCV 90-110% or 80-120% for mercury. Contact lab if unacceptable.	Unable to be assessed. Category A report provided.
Do field duplicate results show good precision for all compounds (see Table 7)?	N/A

Summary of Findings
<ul style="list-style-type: none"> • A trip blank was not included with the samples. • VOC: Bromomethane and Acetone were recovered above the acceptance criteria in the LCS and/or LCSD. Bromomethane was not detected in the samples; therefore, no qualifications were required. Acetone is a poor performing compound and a common laboratory contaminant. The analyte was detected in the Effluent sample; therefore, the results are J qualified as estimated. • VOC: The laboratory reviewed the Influent results and noted an acetone peak that was less than the MDL. The Influent sample was run at a 10X dilution; therefore, the acetone was likely diluted out and is present in both the Influent and Effluent samples.

Data Usability Summary Report	Project: Mr C's Dry Cleaning:
Date Completed: February 05, 2014	Completed by: Lynne Kalmbach and Marcia Meredith Galloway

Table 2 - List of Positive Results for Blank Samples
None

Table 2A - List of Samples Qualified for Method Blank Contamination
None

Table 2B - List of Samples Qualified for Field Blank Contamination
None

Table 3 - List of Samples with Surrogates outside Control Limits
None

Table 4 - List of MS/MSD Recoveries and RPDs outside Control Limits
None

Table 5 - List of LCS Recoveries outside Control Limits

Method	Sample ID	Analyte	Rec.	Low Limit	High Limit	Sample Affected	Sample Qualifier
8260C	LCS-75609	Bromomethane	160	30	145	--	None: High and ND
8260C	LCS-75609	Acetone	143	40	140	Effluent	J
8260C	LCSD-75609	Bromomethane	167	30	145	--	None: Nigh and ND

Table 6 - Samples that were Reanalyzed

Sample ID	Lab ID	Method	Sample Type	Action
Influent	N0042-01	8260C	AQ	10X dilution was performed to bring the target analytes within the calibration range.

Table 7 - Summary of Field Duplicate Results
None

Acronym List and Table Key:

- COC = chain of custody
- DUSR = data usability summary report
- GC/MS = gas chromatography / mass spectrometry

Data Usability Summary Report	Project: Mr C's Dry Cleaning:
Date Completed: February 05, 2014	Completed by: Lynne Kalmbach and Marcia Meredith Galloway

Acronym List and Table Key:

- LCS = laboratory control sample
- MS = matrix spike
- MSD = matrix spike duplicate
- NC = not calculated
- ND = not detected
- NYSDEC = New York State Department of Environmental Conservation
- PQL = practical quantitation limit
- QA = quality assurance
- QAPP = quality assurance project plan
- QC = quality control
- RPD = relative percent difference
- SDG = sample delivery group
- VOC = volatile organic compound

Attachment D
Summary of Site Utility Costs and Projections
January to December 2014

Mr. C's Dry Cleaners Site - Remedial Treatment Utility Costs

NYSDEC Work Assignment #DC13

12 Months of System Operation and Maintenance

January 2014 Report

	Optimum Operating Hours	Actual Operating Hours	Up-time Percentage	Capacity	Comments	Budget Remaining:	Electric:	Telephone:	Gas	Total:
	624	616	98.72%	8.8%	Snow and Sub-freezing January	\$15,800.00		\$540.00	\$1,120.00	\$17,460.00
January-13			#DIV/0!							
February-13			#DIV/0!							
March-13			#DIV/0!							
April-13			#DIV/0!							
May-13			#DIV/0!							
June-13			#DIV/0!							
July-13			#DIV/0!							
August-13			#DIV/0!							
September-13			#DIV/0!							
October-13			#DIV/0!							
November-13			#DIV/0!							
December-13			#DIV/0!							
Totals to Date	624	616	98.72%							

* Percent Capacity is based on initial operating groundwater flows from the eight installed pumps from 9/02. Evaluated on total gallons discharged for monthly operating time. Maximum pump discharges calculated as an average of 78 gpm as the total for all 8 pumps at the site if all pumps operate 100%. With the exception of groundwater pump RW-1, all others run on a batch basis.

Monthly Average Costs

Mr. C's Electric	\$	-								
Agway Electric	\$	-								
Mr. C's Gas	\$	-								
Mr. C's Telephone	\$	-								
Ave. Utility Cost Total	\$	-	times	12 Month Estimate	\$0.00					

ATTACHMENT D