

February 10, 2019

Ms. Kerry Maloney, P.G.
NYSDEC, Division of Environmental Remediation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7015

Via email: Kerry.maloney@dec.ny.gov

Re: Progress Report: January 2020
Frost Street Sites: Site ID#s 1-30043 I, L, M
New Cassel Industrial Area, Westbury, New York

Dear Ms. Maloney:

EnSafe Inc. is pleased to submit this Progress Report for the Frost Street Sites (Site ID#s 1-30043 I, L, M) for operation, maintenance, and monitoring (OM&M) activities completed in January 2020 for the onsite air sparge/soil vapor extraction (AS/SVE) and groundwater extraction systems.

Air Sparge/Soil Vapor Extraction System – Operable Unit 1

- AS/SVE system operations continued this month, per the OM&M Manual. During periodic visits, system parameters were logged on dedicated forms (Appendix A). No alarm calls were received in January 2020.
- Quantitative sampling of the SVE system granular activated carbon influent and effluent air flow was conducted on January 16, 2020, using Summa canisters. These samples were obtained by EnviroTrac, submitted to Phoenix Environmental Laboratories, and analyzed by Method TO-15. Results are included in Appendix B.
 - Photoionization detector readings and influent concentrations of Frost Street-related contaminants of concern (tetrachloroethene, trichloroethene, and cis-1,2-dichloroethene [4,501 µg/m³]) continue to indicate significant mass extraction.
 - A carbon exchange was performed January 8. As expected, effluent concentrations are now below the carbon exchange indicator concentrations.

Frost Street Sites Effluent Compliance			
System Flow Rate =		800 ft ³ /min	
Compound	Annual Mass Emission Limit ¹ (lbs/year)	Carbon Exchange Required Indicator Concentration (µg/m ³) ²	January 2020 Effluent Concentration (µg/m ³)
Trichloroethene	500	19,000	ND
Tetrachloroethene	1,000	38,000	ND
Vinyl Chloride	100	3,800	ND
Cis-1,2-Dichloroethene ³	100	3,800	ND

Notes:

ft/min cubic feet per minute

lbs/year pounds per year

µg/m³ micrograms per cubic meter

1 Source of Mass Emission Limit: Part 212-2.2 Table 2 — High Toxicity Air Contaminant List

2 These limits were calculated based on Frost Street-specific system operations (i.e., flow rate) in order to remain below the annual HTAC emissions listed in Part 212-2.2 Table 2. Remaining below these concentrations ensures that annual emissions will not exceed the limit which demonstrates compliance with Part 212 without having to perform compound-specific analyses.

3 Cis-1,2-dichloroethene is not a listed HTAC, so the default is 100 lbs/year.

- System condensate water was discharged from the holding tank to the sewer via the onsite connection (January 16 and 30 – 500 gallons each discharge). All water is treated via activate carbon adsorption prior to discharge. Groundwater concentrations did not exceed applicable limits, as shown in Appendix C.

Groundwater Extraction System – Operable Unit 2

The pumps in EX-1A, EX-1B, EX-1C, and EX-1D operated near design flow rates (30, 30, 48, and 48 gallons per minute, respectively) for all of January with the following exceptions:

- The system was down from January 2 at 2:15 pm to January 3 at 9:45 am due to an Emergency Stop alarm. The system was restarted remotely.
- The pump in EX-1D operated at one-third its design flow rate (approximately 15 gpm) from January 3 at 9:45 am to January 15 at 8:15 am. The pump was restarted remotely and regained its full rate.

EnSafe collected and prepared the additional information requested by NYSDEC on February 21, 2019, (additional pressure transducer data and groundwater elevation maps) to facilitate review and comment on the *Expanded Pumping Test Summary, Findings, and Recommendations*, submitted on August 10, 2018. This information was transmitted to NYSDEC on March 22, 2019.

Groundwater Monitoring

The fourth quarter 2019 groundwater sampling event was completed the week of December 2, 2019. The electronic data deliverable was submitted to NYSDEC on January 20, 2020; the report will be submitted in February 2020.

If you have any questions or require additional information, please do not hesitate to contact me at 860-665-1140 or astark@ensafe.com.

Sincerely,

EnSafe, Inc., by



Alexandra Stark, P.E.

Attachments

Copies:	A. Tamuno, Esq., NYSDEC	<i>Via email to amtamuno@gw.dec.state.ny.us</i>
	C. Bethoney, NYSDOH	<i>Via email to charlotte.bethoney@health.ny.gov</i>
	J. Nealon, NYSDOH	<i>Via email to jacquelyn.nealon@health.ny.gov</i>
	R. Putnam, NCDOH	<i>Via email to rputnam@nassaucountyny.gov</i>
	J. Vasquez, U.S. EPA	<i>Via email to vazquez.julio@epa.gov</i>
	T. Pupilla, Sanders Equities	<i>Via email to tpupilla@sandersequities.com</i>
	K. Maldonado, Esq.	<i>Via email to kevinmaldonado64@yahoo.com</i>
	J. Privitera, Esq.	<i>Via email to privitera@mltw.com</i>
	P. Coop, EnSafe	<i>Via email to pcoop@ensafe.com</i>
	J. Wilkinson, Envirotrac	<i>Via email to jamesw@envirotrac.com</i>

Appendix A
AS/SVE System Operation and Maintenance Logs

Operation & Maintenance Data Sheet
 Ensae-Frost Street
 101 Frost Street
 Westbury, NY

EnviroTrac Environmental Services
 5 Old Dock Road, Yaphank, NY 11980
 (631)924-3001, Fax (631)924-5001

Date: 3-Jan
 Weather / Temp: Cloudy / 40 DEG
 Technician / Operator: JW

Arrival Time: 10:00
 Departure Time: 10:30

System Status									
	Arrival	Departure		Arrival	Departure				
SVE Blower 1 (ON/OFF)	OFF	OFF	Sensaphone (ON/OFF)	ON	ON				
SVE Blower 2 (ON/OFF)	ON	ON	Surge Protection (ON/OFF)	ON	ON				
AS Compressor 1 (ON/OFF)	OFF	OFF	Lightning Protection (White/Black)	White	White				
AS Compressor 2 (ON/OFF)	ON	ON							
Soil Vapor Extraction System									
Blower Air Velocity/Flow Rate (fpm)/(cfm)	4100	805	Blower 1 Total Runtime (hrs)	57,476.3					
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	55,475.3					
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0					
Moisture Separator Vacuum ("Hg)	4		Blower 2 Air Filter Differential Pressure ("H2O)	0					
VGAC-1 Influent Vacuum ("H2O)	80		VGAC-1 Influent PID (ppm)	7.1					
VGAC-1 Effluent Vacuum ("H2O)	72		VGAC-1 Effluent PID (ppm)	0.0					
VGAC-2 Influent Vacuum ("H2O)	65		VGAC-2 Influent PID (ppm)	7.1					
VGAC-2 Effluent Vacuum ("H2O)	70		VGAC-2 Effluent PID (ppm)	0.0					
VGAC-3 Influent Pressure ("H2O)	20		VGAC-3 Influent PID (ppm)	0.0					
VGAC-3 Effluent Pressure ("H2O)	2		VGAC-3 Effluent PID (ppm)	0.0					
VGAC-3 Influent Temp (DegF)	140		Blower Effluent PID (ppm)	0.0					
Blower Effluent Pressure ("H2O)	20								
Transfer Pump Total Runtime (hrs)	25,037.4		Condensate Storage Tank Level (gal)	230					
SVE Manifold Legs - Vacuum/Flow Rate/PID									
	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	50	4800	105		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	42	4500	98	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	52	3000	65		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	44	4000	87	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	44	5200	113		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	40	6200	135	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	42	4200	92		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	42	2900	63	
Air Sparge System									
Compressor 1 Pressure (psi)	Off for repairs			Compressor 2 Pressure (psi)	86				
Compressor 1 Temperature (degF)	Off for repairs			Compressor 2 Temperature (degF)	173				
Compressor 1 Runtime (hrs)	27,317			Compressor 2 Runtime (hrs)	36,631				
Manifold Regulator Pressure (psi)	75								
AS Manifold Legs - Pressure/Flow Rate									
	Pressure	Flow Rate		Pressure	Flow Rate				
AS-1 (psi)/(cfm)	18	10	AS-11 (psi)/(cfm)	17	4				
AS-2 (psi)/(cfm)	18	6	AS-12B (psi)/(cfm)	17	9				
AS-3 (psi)/(cfm)	16	5	AS-13B (psi)/(cfm)	16	10				
AS-4 (psi)/(cfm)	16	4	AS-14 (psi)/(cfm)	16	10				
AS-5 (psi)/(cfm)	17	7	AS-15 (psi)/(cfm)	16	10				
AS-6 (psi)/(cfm)	17	8	AS-16B (psi)/(cfm)	15	10				
AS-7 (psi)/(cfm)	17	5	AS-17 (psi)/(cfm)	15	5				
AS-8 (psi)/(cfm)	16	8	AS-18 (psi)/(cfm)	15	6				
AS-9 (psi)/(cfm)	17	10	AS-19 (psi)/(cfm)	16	4				
AS-10B (psi)/(cfm)	15	10							

Notes, Comments & Observations:

Collected discharge water sample.

Operation & Maintenance Data Sheet
 Ensae-Frost Street
 101 Frost Street
 Westbury, NY

EnviroTrac Environmental Services
 5 Old Dock Road, Yaphank, NY 11980
 (631)924-3001, Fax (631)924-5001

Date: 8-Jan
 Weather / Temp: Cloudy / 35 DEG
 Technician / Operator: JW

Arrival Time: 8:00
 Departure Time: 12:30

System Status									
	Arrival	Departure		Arrival	Departure				
SVE Blower 1 (ON/OFF)	ON	ON	Sensaphone (ON/OFF)	ON	ON				
SVE Blower 2 (ON/OFF)	OFF	OFF	Surge Protection (ON/OFF)	ON	ON				
AS Compressor 1 (ON/OFF)	OFF	OFF	Lightning Protection (White/Black)	White	White				
AS Compressor 2 (ON/OFF)	ON	ON							
Soil Vapor Extraction System									
Blower Air Velocity/Flow Rate (fpm)/(cfm)	4500	884	Blower 1 Total Runtime (hrs)	57,536.2					
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	55,532.9					
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0					
Moisture Separator Vacuum ("Hg)	4		Blower 2 Air Filter Differential Pressure ("H2O)	0					
VGAC-1 Influent Vacuum ("H2O)	80		VGAC-1 Influent PID (ppm)	4.2					
VGAC-1 Effluent Vacuum ("H2O)	72		VGAC-1 Effluent PID (ppm)	0.0					
VGAC-2 Influent Vacuum ("H2O)	65		VGAC-2 Influent PID (ppm)	4.2					
VGAC-2 Effluent Vacuum ("H2O)	70		VGAC-2 Effluent PID (ppm)	0.0					
VGAC-3 Influent Pressure ("H2O)	20		VGAC-3 Influent PID (ppm)	0.0					
VGAC-3 Effluent Pressure ("H2O)	2		VGAC-3 Effluent PID (ppm)	0.0					
VGAC-3 Influent Temp (DegF)	140		Blower Effluent PID (ppm)	0.0					
Blower Effluent Pressure ("H2O)	20								
Transfer Pump Total Runtime (hrs)	25,037.9		Condensate Storage Tank Level (gal)	340					
SVE Manifold Legs - Vacuum/Flow Rate/PID									
	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	54	8000	175		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	48	4400	96	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	56	5000	109		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	48	3200	70	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	48	5500	120		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	47	7000	153	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	48	4600	100		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	50	3100	68	
Air Sparge System									
Compressor 1 Pressure (psi)	Off for repairs				Compressor 2 Pressure (psi)	91			
Compressor 1 Temperature (degF)	Off for repairs				Compressor 2 Temperature (degF)	165			
Compressor 1 Runtime (hrs)	27,317				Compressor 2 Runtime (hrs)	36,748			
Manifold Regulator Pressure (psi)	75								
AS Manifold Legs - Pressure/Flow Rate									
	Pressure		Flow Rate			Pressure		Flow Rate	
AS-1 (psi)/(cfm)	22		6		AS-11 (psi)/(cfm)	20		9	
AS-2 (psi)/(cfm)	21		4		AS-12B (psi)/(cfm)	21		6	
AS-3 (psi)/(cfm)	19		10		AS-13B (psi)/(cfm)	18		7	
AS-4 (psi)/(cfm)	17		4		AS-14 (psi)/(cfm)	20		7	
AS-5 (psi)/(cfm)	22		10		AS-15 (psi)/(cfm)	21		9	
AS-6 (psi)/(cfm)	22		8		AS-16B (psi)/(cfm)	18		8	
AS-7 (psi)/(cfm)	21		8		AS-17 (psi)/(cfm)	19		4	
AS-8 (psi)/(cfm)	20		9		AS-18 (psi)/(cfm)	18		7	
AS-9 (psi)/(cfm)	21		10		AS-19 (psi)/(cfm)	18		9	
AS-10B (psi)/(cfm)	18		7						

Notes, Comments & Observations:

Evoqua on site @ 9AM to change out carbon. O&M performed after changeout.

Operation & Maintenance Data Sheet
 Ensae-Frost Street
 101 Frost Street
 Westbury, NY

EnviroTrac Environmental Services
 5 Old Dock Road, Yaphank, NY 11980
 (631)924-3001, Fax (631)924-5001

Date: 16-Jan
 Weather / Temp: Cloudy / 45 DEG
 Technician / Operator: JW

Arrival Time: 14:30
 Departure Time: 15:00

System Status									
	Arrival	Departure		Arrival	Departure				
SVE Blower 1 (ON/OFF)	ON	ON	Sensaphone (ON/OFF)	ON	ON				
SVE Blower 2 (ON/OFF)	OFF	OFF	Surge Protection (ON/OFF)	ON	ON				
AS Compressor 1 (ON/OFF)	OFF	OFF	Lightning Protection (White/Black)	White	White				
AS Compressor 2 (ON/OFF)	ON	ON							
Soil Vapor Extraction System									
Blower Air Velocity/Flow Rate (fpm)/(cfm)	4500	884	Blower 1 Total Runtime (hrs)	57,634.8					
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	55,628.8					
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0					
Moisture Separator Vacuum ("Hg)	4		Blower 2 Air Filter Differential Pressure ("H2O)	0					
VGAC-1 Influent Vacuum ("H2O)	80		VGAC-1 Influent PID (ppm)	5.9					
VGAC-1 Effluent Vacuum ("H2O)	72		VGAC-1 Effluent PID (ppm)	0.1					
VGAC-2 Influent Vacuum ("H2O)	65		VGAC-2 Influent PID (ppm)	5.9					
VGAC-2 Effluent Vacuum ("H2O)	70		VGAC-2 Effluent PID (ppm)	0.1					
VGAC-3 Influent Pressure ("H2O)	20		VGAC-3 Influent PID (ppm)	0.1					
VGAC-3 Effluent Pressure ("H2O)	2		VGAC-3 Effluent PID (ppm)	0.0					
VGAC-3 Influent Temp (DegF)	135		Blower Effluent PID (ppm)	0.1					
Blower Effluent Pressure ("H2O)	20								
Transfer Pump Total Runtime (hrs)	25,037.9		Condensate Storage Tank Level (gal)	500 → 0					
SVE Manifold Legs - Vacuum/Flow Rate/PID									
	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	54	8000	175	4.3	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	47	4400	96	0.0
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	56	5000	109	7.4	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	48	3200	70	0.0
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	48	5500	120	2.8	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	46	7000	153	27.0
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	48	4500	98	0.0	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	49	3100	68	2.0
Air Sparge System									
Compressor 1 Pressure (psi)	Off for repairs			Compressor 2 Pressure (psi)	81				
Compressor 1 Temperature (degF)	Off for repairs			Compressor 2 Temperature (degF)	164				
Compressor 1 Runtime (hrs)	27,317			Compressor 2 Runtime (hrs)	36,866				
Manifold Regulator Pressure (psi)	70								
AS Manifold Legs - Pressure/Flow Rate									
	Pressure	Flow Rate		Pressure	Flow Rate				
AS-1 (psi)/(cfm)	18	8	AS-11 (psi)/(cfm)	17	4				
AS-2 (psi)/(cfm)	17	4	AS-12B (psi)/(cfm)	18	7				
AS-3 (psi)/(cfm)	17	8	AS-13B (psi)/(cfm)	16	8				
AS-4 (psi)/(cfm)	15	4	AS-14 (psi)/(cfm)	17	10				
AS-5 (psi)/(cfm)	18	9	AS-15 (psi)/(cfm)	17	10				
AS-6 (psi)/(cfm)	18	7	AS-16B (psi)/(cfm)	16	8				
AS-7 (psi)/(cfm)	18	7	AS-17 (psi)/(cfm)	17	8				
AS-8 (psi)/(cfm)	16	9	AS-18 (psi)/(cfm)	17	8				
AS-9 (psi)/(cfm)	17	8	AS-19 (psi)/(cfm)	17	7				
AS-10B (psi)/(cfm)	16	10							

Notes, Comments & Observations: _____

Collected discharge water sample. _____

Operation & Maintenance Data Sheet
Ensafe-Frost Street
101 Frost Street
Westbury, NY

EnviroTrac Environmental Services
5 Old Dock Road, Yaphank, NY 11980
(631)924-3001, Fax (631)924-5001

Date: 23-Jan
Weather / Temp: Cloudy / 45 DEG
Technician / Operator: JW

Arrival Time: 9:30
Departure Time: 10:00

System Status									
	Arrival	Departure		Arrival	Departure				
SVE Blower 1 (ON/OFF)	OFF	OFF	Sensaphone (ON/OFF)	ON	ON				
SVE Blower 2 (ON/OFF)	ON	ON	Surge Protection (ON/OFF)	ON	ON				
AS Compressor 1 (ON/OFF)	OFF	OFF	Lightning Protection (White/Black)	White	White				
AS Compressor 2 (ON/OFF)	ON	ON							
Soil Vapor Extraction System									
Blower Air Velocity/Flow Rate (fpm)/(cfm)	4200	825	Blower 1 Total Runtime (hrs)	57,716.2					
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	55,710.5					
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0					
Moisture Separator Vacuum ("Hg)	4		Blower 2 Air Filter Differential Pressure ("H2O)	9					
VGAC-1 Influent Vacuum ("H2O)	80		VGAC-1 Influent PID (ppm)	4.7					
VGAC-1 Effluent Vacuum ("H2O)	72		VGAC-1 Effluent PID (ppm)	0.0					
VGAC-2 Influent Vacuum ("H2O)	65		VGAC-2 Influent PID (ppm)	4.7					
VGAC-2 Effluent Vacuum ("H2O)	70		VGAC-2 Effluent PID (ppm)	0.0					
VGAC-3 Influent Pressure ("H2O)	20		VGAC-3 Influent PID (ppm)	0.0					
VGAC-3 Effluent Pressure ("H2O)	2		VGAC-3 Effluent PID (ppm)	0.0					
VGAC-3 Influent Temp (DegF)	135		Blower Effluent PID (ppm)	0.0					
Blower Effluent Pressure ("H2O)	20								
Transfer Pump Total Runtime (hrs)	25,038.5		Condensate Storage Tank Level (gal)	350					
SVE Manifold Legs - Vacuum/Flow Rate/PID									
	Vacuum	Velocity	Flow Rate	PID					
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	54	8000	175		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	47	4400	96	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	56	5000	109		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	48	3200	70	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	48	5500	120		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	46	7000	153	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	48	4500	98		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	49	3000	65	
Air Sparge System									
Compressor 1 Pressure (psi)	Off for repairs				Compressor 2 Pressure (psi)	85			
Compressor 1 Temperature (degF)	Off for repairs				Compressor 2 Temperature (degF)	161			
Compressor 1 Runtime (hrs)	27,317				Compressor 2 Runtime (hrs)	37,029			
Manifold Regulator Pressure (psi)	72								
AS Manifold Legs - Pressure/Flow Rate									
	Pressure	Flow Rate			Pressure	Flow Rate			
AS-1 (psi)/(cfm)	18	8		AS-11 (psi)/(cfm)	18	4			
AS-2 (psi)/(cfm)	17	5		AS-12B (psi)/(cfm)	18	7			
AS-3 (psi)/(cfm)	17	8		AS-13B (psi)/(cfm)	15	8			
AS-4 (psi)/(cfm)	15	4		AS-14 (psi)/(cfm)	17	10			
AS-5 (psi)/(cfm)	18	9		AS-15 (psi)/(cfm)	17	10			
AS-6 (psi)/(cfm)	18	7		AS-16B (psi)/(cfm)	17	8			
AS-7 (psi)/(cfm)	18	5		AS-17 (psi)/(cfm)	17	8			
AS-8 (psi)/(cfm)	16	9		AS-18 (psi)/(cfm)	17	8			
AS-9 (psi)/(cfm)	16	7		AS-19 (psi)/(cfm)	17	6			
AS-10B (psi)/(cfm)	16	10							

Notes, Comments & Observations:

High vacuum alarm on SVE filter 2. Need new air filter element.

Operation & Maintenance Data Sheet
 Ensae-Frost Street
 101 Frost Street
 Westbury, NY

EnviroTrac Environmental Services
 5 Old Dock Road, Yaphank, NY 11980
 (631)924-3001, Fax (631)924-5001

Date: 30-Jan
 Weather / Temp: Clear / 37 DEG
 Technician / Operator: JW

Arrival Time: 9:30
 Departure Time: 10:30

System Status									
	Arrival	Departure		Arrival	Departure				
SVE Blower 1 (ON/OFF)	OFF	OFF	Sensaphone (ON/OFF)	ON	ON				
SVE Blower 2 (ON/OFF)	ON	ON	Surge Protection (ON/OFF)	ON	ON				
AS Compressor 1 (ON/OFF)	OFF	OFF	Lightning Protection (White/Black)	White	White				
AS Compressor 2 (ON/OFF)	ON	ON							
Soil Vapor Extraction System									
Blower Air Velocity/Flow Rate (fpm)/(cfm)	4200	825	Blower 1 Total Runtime (hrs)	57,800.1					
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	55,794.7					
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0					
Moisture Separator Vacuum ("Hg)	4		Blower 2 Air Filter Differential Pressure ("H2O)	0					
VGAC-1 Influent Vacuum ("H2O)	80		VGAC-1 Influent PID (ppm)	5.0					
VGAC-1 Effluent Vacuum ("H2O)	72		VGAC-1 Effluent PID (ppm)	0.0					
VGAC-2 Influent Vacuum ("H2O)	65		VGAC-2 Influent PID (ppm)	5.0					
VGAC-2 Effluent Vacuum ("H2O)	70		VGAC-2 Effluent PID (ppm)	0.0					
VGAC-3 Influent Pressure ("H2O)	20		VGAC-3 Influent PID (ppm)	0.0					
VGAC-3 Effluent Pressure ("H2O)	2		VGAC-3 Effluent PID (ppm)	0.0					
VGAC-3 Influent Temp (DegF)	135		Blower Effluent PID (ppm)	0.0					
Blower Effluent Pressure ("H2O)	20								
Transfer Pump Total Runtime (hrs)	25,038.9		Condensate Storage Tank Level (gal)	500 → 0					
SVE Manifold Legs - Vacuum/Flow Rate/PID									
	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	50	7500	164		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	42	4000	87	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	52	4500	98		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	43	3000	65	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	44	5100	111		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	42	6500	142	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	42	4200	92		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	44	2900	63	
Air Sparge System									
Compressor 1 Pressure (psi)	Off for repairs			Compressor 2 Pressure (psi)	83				
Compressor 1 Temperature (degF)	Off for repairs			Compressor 2 Temperature (degF)	153				
Compressor 1 Runtime (hrs)	27,317			Compressor 2 Runtime (hrs)	37,197				
Manifold Regulator Pressure (psi)	70								
AS Manifold Legs - Pressure/Flow Rate									
	Pressure	Flow Rate		Pressure	Flow Rate				
AS-1 (psi)/(cfm)	18	11	AS-11 (psi)/(cfm)	17	4				
AS-2 (psi)/(cfm)	17	7	AS-12B (psi)/(cfm)	18	9				
AS-3 (psi)/(cfm)	17	7	AS-13B (psi)/(cfm)	15	12				
AS-4 (psi)/(cfm)	14	4	AS-14 (psi)/(cfm)	16	12				
AS-5 (psi)/(cfm)	18	7	AS-15 (psi)/(cfm)	17	10				
AS-6 (psi)/(cfm)	18	9	AS-16B (psi)/(cfm)	15	11				
AS-7 (psi)/(cfm)	18	5	AS-17 (psi)/(cfm)	16	6				
AS-8 (psi)/(cfm)	16	10	AS-18 (psi)/(cfm)	16	6				
AS-9 (psi)/(cfm)	17	7	AS-19 (psi)/(cfm)	16	4				
AS-10B (psi)/(cfm)	15	11							

Notes, Comments & Observations:

Changed SVE-2 air filter.

Collected water sample for total metals and PCBs.

Appendix B
AS/SVE System Influent/Effluent Sampling
Laboratory Analytical Results



Friday, January 24, 2020

Attn: James Wilkinson
EnviroTrac
5 Old Dock Rd
Yaphank, NY 11980

Project ID: ENSAFE WESTBURY
SDG ID: GCF16065
Sample ID#s: CF16065 - CF16066

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Phyllis Shiller".

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Sample Id Cross Reference

January 24, 2020

SDG I.D.: GCF16065

Project ID: ENSAFE WESTBURY

Client Id	Lab Id	Matrix
SVE EFFLUENT	CF16065	AIR
SVE INFLUENT	CF16066	AIR



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

January 24, 2020

FOR: Attn: James Wilkinson
EnviroTrac
5 Old Dock Rd
Yaphank, NY 11980

Sample Information

Matrix: AIR
Location Code: ENVIOTR
Rush Request: Standard
P.O.#:
Canister Id: 819

Custody Information

Collected by: JW
Received by: CP
Analyzed by: see "By" below

Date

01/16/20
01/20/20

Time

14:54
13:46

Laboratory Data

SDG ID: GCF16065
Phoenix ID: CF16065

Project ID: ENSAFE WESTBURY
Client ID: SVE EFFLUENT

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
Volatiles (TO15)							
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	01/23/20	AW	1
1,1,1-Trichloroethane	ND	0.183	ND	1.00	01/23/20	AW	1
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	01/23/20	AW	1
1,1,2-Trichloroethane	ND	0.183	ND	1.00	01/23/20	AW	1
1,1-Dichloroethane	ND	0.247	ND	1.00	01/23/20	AW	1
1,1-Dichloroethene	ND	0.051	ND	0.20	01/23/20	AW	1
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	01/23/20	AW	1
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	01/23/20	AW	1
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	01/23/20	AW	1
1,2-Dichlorobenzene	ND	0.166	ND	1.00	01/23/20	AW	1
1,2-Dichloroethane	ND	0.247	ND	1.00	01/23/20	AW	1
1,2-dichloropropane	ND	0.217	ND	1.00	01/23/20	AW	1
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	01/23/20	AW	1
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	01/23/20	AW	1
1,3-Butadiene	ND	0.452	ND	1.00	01/23/20	AW	1
1,3-Dichlorobenzene	ND	0.166	ND	1.00	01/23/20	AW	1
1,4-Dichlorobenzene	ND	0.166	ND	1.00	01/23/20	AW	1
1,4-Dioxane	ND	0.278	ND	1.00	01/23/20	AW	1
2-Hexanone(MBK)	ND	0.244	ND	1.00	01/23/20	AW	1
4-Ethyltoluene	ND	0.204	ND	1.00	01/23/20	AW	1
4-Isopropyltoluene	ND	0.182	ND	1.00	01/23/20	AW	1
4-Methyl-2-pentanone(MIBK)	ND	0.244	ND	1.00	01/23/20	AW	1
Acetone	22.2	0.421	52.7	1.00	01/23/20	AW	1
Acrylonitrile	ND	0.461	ND	1.00	01/23/20	AW	1
Benzene	0.422	0.313	1.35	1.00	01/23/20	AW	1
Benzyl chloride	ND	0.193	ND	1.00	01/23/20	AW	1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND	0.149	ND	1.00	01/23/20	AW	1	
Bromoform	ND	0.097	ND	1.00	01/23/20	AW	1	
Bromomethane	ND	0.258	ND	1.00	01/23/20	AW	1	
Carbon Disulfide	ND	0.321	ND	1.00	01/23/20	AW	1	
Carbon Tetrachloride	0.094	0.032	0.59	0.20	01/23/20	AW	1	
Chlorobenzene	ND	0.217	ND	1.00	01/23/20	AW	1	
Chloroethane	ND	0.379	ND	1.00	01/23/20	AW	1	
Chloroform	ND	0.205	ND	1.00	01/23/20	AW	1	
Chloromethane	0.580	0.485	1.20	1.00	01/23/20	AW	1	
Cis-1,2-Dichloroethene	ND	0.051	ND	0.20	01/23/20	AW	1	
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	01/23/20	AW	1	
Cyclohexane	ND	0.291	ND	1.00	01/23/20	AW	1	
Dibromochloromethane	ND	0.118	ND	1.00	01/23/20	AW	1	
Dichlorodifluoromethane	0.377	0.202	1.86	1.00	01/23/20	AW	1	
Ethanol	17.3	0.531	32.6	1.00	01/23/20	AW	1	1
Ethyl acetate	ND	0.278	ND	1.00	01/23/20	AW	1	1
Ethylbenzene	ND	0.230	ND	1.00	01/23/20	AW	1	
Heptane	ND	0.244	ND	1.00	01/23/20	AW	1	
Hexachlorobutadiene	ND	0.094	ND	1.00	01/23/20	AW	1	
Hexane	12.1	0.284	42.6	1.00	01/23/20	AW	1	
Isopropylalcohol	0.904	0.407	2.22	1.00	01/23/20	AW	1	
Isopropylbenzene	ND	0.204	ND	1.00	01/23/20	AW	1	
m,p-Xylene	ND	0.230	ND	1.00	01/23/20	AW	1	
Methyl Ethyl Ketone	0.391	0.339	1.15	1.00	01/23/20	AW	1	
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	01/23/20	AW	1	
Methylene Chloride	8.39	0.864	29.1	3.00	01/23/20	AW	1	
n-Butylbenzene	ND	0.182	ND	1.00	01/23/20	AW	1	1
o-Xylene	ND	0.230	ND	1.00	01/23/20	AW	1	
Propylene	ND	0.581	ND	1.00	01/23/20	AW	1	1
sec-Butylbenzene	ND	0.182	ND	1.00	01/23/20	AW	1	1
Styrene	ND	0.235	ND	1.00	01/23/20	AW	1	
Tetrachloroethene	ND	0.037	ND	0.25	01/23/20	AW	1	
Tetrahydrofuran	ND	0.339	ND	1.00	01/23/20	AW	1	1
Toluene	0.472	0.266	1.78	1.00	01/23/20	AW	1	
Trans-1,2-Dichloroethene	ND	0.252	ND	1.00	01/23/20	AW	1	
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	01/23/20	AW	1	
Trichloroethene	ND	0.037	ND	0.20	01/23/20	AW	1	
Trichlorofluoromethane	0.314	0.178	1.76	1.00	01/23/20	AW	1	
Trichlorotrifluoroethane	ND	0.131	ND	1.00	01/23/20	AW	1	
Vinyl Chloride	ND	0.078	ND	0.20	01/23/20	AW	1	
<u>QA/QC Surrogates/Internals</u>								
% Bromofluorobenzene	96	%	96	%	01/23/20	AW	1	
% IS-1,4-Difluorobenzene	63	%	63	%	01/23/20	AW	1	
% IS-Bromochloromethane	57	%	57	%	01/23/20	AW	1	3
% IS-Chlorobenzene-d5	75	%	75	%	01/23/20	AW	1	

Client ID: SVE EFFLUENT

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL

BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

The canister was received under no vacuum, therefore sample results may not be representative.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200.

The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

January 24, 2020

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

January 24, 2020

FOR: Attn: James Wilkinson
EnviroTrac
5 Old Dock Rd
Yaphank, NY 11980

Sample Information

Matrix: AIR
Location Code: ENVIOTR
Rush Request: Standard
P.O.#:
Canister Id: 779

Custody Information

Collected by: JW
Received by: CP
Analyzed by: see "By" below

Date

01/16/20
01/20/20

Time

14:57
13:46

Laboratory Data

SDG ID: GCF16065
Phoenix ID: CF16066

Project ID: ENSAFE WESTBURY
Client ID: SVE INFLUENT

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
<u>Volatiles (TO15)</u>								
1,1,1,2-Tetrachloroethane	ND	0.729	ND	5.00	01/23/20	AW	5	1
1,1,1-Trichloroethane	ND	0.917	ND	5.00	01/23/20	AW	5	
1,1,2,2-Tetrachloroethane	ND	0.729	ND	5.00	01/23/20	AW	5	
1,1,2-Trichloroethane	ND	0.917	ND	5.00	01/23/20	AW	5	
1,1-Dichloroethane	ND	1.24	ND	5.02	01/23/20	AW	5	
1,1-Dichloroethene	ND	0.252	ND	1.00	01/23/20	AW	5	
1,2,4-Trichlorobenzene	ND	0.674	ND	5.00	01/23/20	AW	5	
1,2,4-Trimethylbenzene	ND	1.02	ND	5.01	01/23/20	AW	5	
1,2-Dibromoethane(EDB)	ND	0.651	ND	5.00	01/23/20	AW	5	
1,2-Dichlorobenzene	ND	0.832	ND	5.00	01/23/20	AW	5	
1,2-Dichloroethane	ND	1.24	ND	5.02	01/23/20	AW	5	
1,2-dichloropropane	ND	1.08	ND	4.99	01/23/20	AW	5	
1,2-Dichlorotetrafluoroethane	ND	0.716	ND	5.00	01/23/20	AW	5	
1,3,5-Trimethylbenzene	ND	1.02	ND	5.01	01/23/20	AW	5	
1,3-Butadiene	ND	2.26	ND	5.00	01/23/20	AW	5	
1,3-Dichlorobenzene	ND	0.832	ND	5.00	01/23/20	AW	5	
1,4-Dichlorobenzene	ND	0.832	ND	5.00	01/23/20	AW	5	
1,4-Dioxane	ND	1.39	ND	5.01	01/23/20	AW	5	
2-Hexanone(MBK)	ND	1.22	ND	4.99	01/23/20	AW	5	1
4-Ethyltoluene	ND	1.02	ND	5.01	01/23/20	AW	5	1
4-Isopropyltoluene	ND	0.911	ND	5.00	01/23/20	AW	5	1
4-Methyl-2-pentanone(MIBK)	ND	1.22	ND	4.99	01/23/20	AW	5	
Acetone	8.60	2.11	20.4	5.01	01/23/20	AW	5	
Acrylonitrile	ND	2.31	ND	5.01	01/23/20	AW	5	
Benzene	ND	1.57	ND	5.01	01/23/20	AW	5	
Benzyl chloride	ND	0.966	ND	5.00	01/23/20	AW	5	

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND	0.747	ND	5.00	01/23/20	AW	5	
Bromoform	ND	0.484	ND	5.00	01/23/20	AW	5	
Bromomethane	ND	1.29	ND	5.01	01/23/20	AW	5	
Carbon Disulfide	ND	1.61	ND	5.01	01/23/20	AW	5	
Carbon Tetrachloride	ND	0.159	ND	1.00	01/23/20	AW	5	
Chlorobenzene	ND	1.09	ND	5.01	01/23/20	AW	5	
Chloroethane	ND	1.90	ND	5.01	01/23/20	AW	5	
Chloroform	ND	1.02	ND	4.98	01/23/20	AW	5	
Chloromethane	ND	2.42	ND	4.99	01/23/20	AW	5	
Cis-1,2-Dichloroethene	38.7	0.252	153	1.00	01/23/20	AW	5	
cis-1,3-Dichloropropene	ND	1.10	ND	4.99	01/23/20	AW	5	
Cyclohexane	ND	1.45	ND	4.99	01/23/20	AW	5	
Dibromochloromethane	ND	0.587	ND	5.00	01/23/20	AW	5	
Dichlorodifluoromethane	ND	1.01	ND	4.99	01/23/20	AW	5	
Ethanol	10.5	2.66	19.8	5.01	01/23/20	AW	5	1
Ethyl acetate	ND	1.39	ND	5.01	01/23/20	AW	5	1
Ethylbenzene	ND	1.15	ND	4.99	01/23/20	AW	5	
Heptane	ND	1.22	ND	5.00	01/23/20	AW	5	
Hexachlorobutadiene	ND	0.469	ND	5.00	01/23/20	AW	5	
Hexane	ND	1.42	ND	5.00	01/23/20	AW	5	
Isopropylalcohol	9.00	2.04	22.1	5.01	01/23/20	AW	5	
Isopropylbenzene	ND	1.02	ND	5.01	01/23/20	AW	5	
m,p-Xylene	ND	1.15	ND	4.99	01/23/20	AW	5	
Methyl Ethyl Ketone	ND	1.70	ND	5.01	01/23/20	AW	5	
Methyl tert-butyl ether(MTBE)	ND	1.39	ND	5.01	01/23/20	AW	5	
Methylene Chloride	ND	4.32	ND	15.0	01/23/20	AW	5	
n-Butylbenzene	ND	0.911	ND	5.00	01/23/20	AW	5	1
o-Xylene	ND	1.15	ND	4.99	01/23/20	AW	5	
Propylene	ND	2.91	ND	5.01	01/23/20	AW	5	1
sec-Butylbenzene	ND	0.911	ND	5.00	01/23/20	AW	5	1
Styrene	ND	1.17	ND	4.98	01/23/20	AW	5	
Tetrachloroethene	608	2.77	4120	18.8	01/24/20	AW	75	
Tetrahydrofuran	ND	1.70	ND	5.01	01/23/20	AW	5	1
Toluene	ND	1.33	ND	5.01	01/23/20	AW	5	
Trans-1,2-Dichloroethene	ND	1.26	ND	4.99	01/23/20	AW	5	
trans-1,3-Dichloropropene	ND	1.10	ND	4.99	01/23/20	AW	5	
Trichloroethene	42.5	0.186	228	1.00	01/23/20	AW	5	
Trichlorofluoromethane	ND	0.891	ND	5.00	01/23/20	AW	5	
Trichlorotrifluoroethane	ND	0.653	ND	5.00	01/23/20	AW	5	
Vinyl Chloride	ND	0.391	ND	1.00	01/23/20	AW	5	
<u>QA/QC Surrogates/Internals</u>								
% Bromofluorobenzene (5x)	110	%	110	%	01/23/20	AW	5	
% IS-1,4-Difluorobenzene (5x)	53	%	53	%	01/23/20	AW	5	3
% IS-Bromochloromethane (5x)	58	%	58	%	01/23/20	AW	5	3
% IS-Chlorobenzene-d5 (5x)	59	%	59	%	01/23/20	AW	5	3
% Bromofluorobenzene (75x)	105	%	105	%	01/24/20	AW	75	
% IS-1,4-Difluorobenzene (75x)	118	%	118	%	01/24/20	AW	75	
% IS-Bromochloromethane (75x)	122	%	122	%	01/24/20	AW	75	
% IS-Chlorobenzene-d5 (75x)	118	%	118	%	01/24/20	AW	75	

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
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1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

3 = This parameter exceeds laboratory specified limits.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL

BRL=Below Reporting Level L=Biased Low

QA/QC Surrogates: Surrogates are compounds (preceded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.



Phyllis Shiller, Laboratory Director

January 24, 2020

Reviewed and Released by: Greg Lawrence, Assistant Lab Director



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Canister Sampling Information

January 24, 2020

FOR: Attn: James Wilkinson
EnviroTrac
5 Old Dock Rd
Yaphank, NY 11980

Location Code: ENVIOTR

SDG I.D.: GCF16065

Project ID: ENSAFE WESTBURY

Client Id	Lab Id	Canister		Reg. Id	Chk Out Date	Laboratory					Field			
		Id	Type			Out Hg	In Hg	Out Flow	In Flow	Flow RPD	Start Hg	End Hg	Sampling Start Date	Sampling End Date
SVE EFFLUENT	CF16065	819	1.4L		01/13/20	-30	0	LB SAM	Grab				01/16/20 2:53	01/16/20 2:54
SVE INFLUENT	CF16066	779	1.4L		01/13/20	-30	-4	LB SAM	Grab				01/16/20 2:56	01/16/20 2:57



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

January 24, 2020

QA/QC Data

SDG I.D.: GCF16065

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
QA/QC Batch 515728 (ppbv), QC Sample No: CF16058 (CF16065, CF16066 (5X, 75X))												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.150	ND	1.03	95	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.180	ND	0.98	87	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.150	ND	1.03	96	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.180	ND	0.98	95	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.250	ND	1.01	100	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.050	ND	0.20	84	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.130	ND	0.96	108	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.200	ND	0.98	92	1.19	1.18	0.242	0.240	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.170	ND	1.02	94	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.250	ND	1.01	91	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.220	ND	1.02	108	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.140	ND	0.98	87	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.200	ND	0.98	89	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.450	ND	0.99	86	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.170	ND	1.02	91	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.170	ND	1.02	95	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.280	ND	1.01	99	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.240	ND	0.98	95	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.200	ND	0.98	87	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.180	ND	0.99	84	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.240	ND	0.98	86	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.420	ND	1.00	88	17.0	16.0	7.14	6.72	6.1	70 - 130	25
Acrylonitrile	ND	0.460	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.310	ND	0.99	95	ND	ND	ND	ND	NC	70 - 130	25
Benzyl chloride	ND	0.190	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.150	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.097	ND	1.00	115	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.260	ND	1.01	83	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.320	ND	1.00	89	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.032	ND	0.20	101	0.50	0.47	0.079	0.074	NC	70 - 130	25
Chlorobenzene	ND	0.220	ND	1.01	100	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.380	ND	1.00	86	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.200	ND	0.98	96	1.53	1.37	0.313	0.281	NC	70 - 130	25
Chloromethane	ND	0.480	ND	0.99	104	ND	ND	ND	ND	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.256	ND	1.01	100	0.46	ND	0.116	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.290	ND	1.00	100	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.120	ND	1.02	105	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.200	ND	0.99	88	1.66	1.78	0.336	0.360	NC	70 - 130	25
Ethanol	ND	0.530	ND	1.00	98	38.2	36.9	20.3	19.6	3.5	70 - 130	25

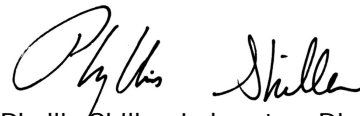
QA/QC Data

SDG I.D.: GCF16065

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits
Ethyl acetate	ND	0.280	ND	1.01	99	ND	ND	ND	ND	NC	70 - 130	25
Ethylbenzene	ND	0.230	ND	1.00	93	ND	ND	ND	ND	NC	70 - 130	25
Heptane	ND	0.240	ND	0.98	93	ND	ND	ND	ND	NC	70 - 130	25
Hexachlorobutadiene	ND	0.094	ND	1.00	87	ND	ND	ND	ND	NC	70 - 130	25
Hexane	ND	0.280	ND	0.99	108	1.03	ND	0.292	ND	NC	70 - 130	25
Isopropylalcohol	ND	0.410	ND	1.01	90	1.65	1.51	0.672	0.616	NC	70 - 130	25
Isopropylbenzene	ND	0.200	ND	0.98	92	ND	ND	ND	ND	NC	70 - 130	25
m,p-Xylene	ND	0.230	ND	1.00	94	ND	ND	ND	ND	NC	70 - 130	25
Methyl Ethyl Ketone	ND	0.340	ND	1.00	95	6.13	5.78	2.08	1.96	5.9	70 - 130	25
Methyl tert-butyl ether(MTBE)	ND	0.280	ND	1.01	90	ND	ND	ND	ND	NC	70 - 130	25
Methylene Chloride	ND	0.860	ND	2.99	91	3.19	3.05	0.918	0.879	NC	70 - 130	25
n-Butylbenzene	ND	0.180	ND	0.99	83	ND	ND	ND	ND	NC	70 - 130	25
o-Xylene	ND	0.230	ND	1.00	100	ND	ND	ND	ND	NC	70 - 130	25
Propylene	ND	0.580	ND	1.00	115	ND	ND	ND	ND	NC	70 - 130	25
sec-Butylbenzene	ND	0.180	ND	0.99	86	ND	ND	ND	ND	NC	70 - 130	25
Styrene	ND	0.230	ND	0.98	92	ND	ND	ND	ND	NC	70 - 130	25
Tetrachloroethene	ND	0.037	ND	0.25	96	43.9	41.3	6.48	6.09	6.2	70 - 130	25
Tetrahydrofuran	ND	0.340	ND	1.00	95	6.78	6.16	2.30	2.09	9.6	70 - 130	25
Toluene	ND	0.270	ND	1.02	99	ND	ND	ND	ND	NC	70 - 130	25
Trans-1,2-Dichloroethene	ND	0.250	ND	0.99	91	ND	ND	ND	ND	NC	70 - 130	25
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	91	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.037	ND	0.20	96	0.91	0.88	0.169	0.163	NC	70 - 130	25
Trichlorofluoromethane	ND	0.180	ND	1.01	80	1.53	1.53	0.273	0.272	NC	70 - 130	25
Trichlorotrifluoroethane	ND	0.130	ND	1.00	84	ND	ND	ND	ND	NC	70 - 130	25
Vinyl Chloride	ND	0.078	ND	0.20	85	ND	ND	ND	ND	NC	70 - 130	25
% Bromofluorobenzene	93	%	93	%	99	93	94	93	94	NC	70 - 130	25
% IS-1,4-Difluorobenzene	116	%	116	%	68	68	70	68	70	NC	60 - 140	25
% IS-Bromochloromethane	123	%	123	%	66	65	67	65	67	NC	60 - 140	25
% IS-Chlorobenzene-d5	111	%	111	%	76	68	70	68	70	NC	60 - 140	25

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference
 LCS - Laboratory Control Sample
 LCSD - Laboratory Control Sample Duplicate
 MS - Matrix Spike
 MS Dup - Matrix Spike Duplicate
 NC - No Criteria
 Intf - Interference


 Phyllis Shiller, Laboratory Director
 January 24, 2020

Friday, January 24, 2020

Criteria: None
State: NY

Sample Criteria Exceedances Report
GCF16065 - ENVIOTR

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
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*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Comments

January 24, 2020

SDG I.D.: GCF16065

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Appendix C
Water Sample
Laboratory Analytical Results



*American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com*

January 27, 2020

Jim Wilkinson
Envirotrac
5 Old Dock Road
Yaphank, NY 11980
TEL: (631) 924-3001
FAX: (631) 924-5001

RE: 101 Frost Street, Westbury, NY

Order No.: 2001100

Dear Jim Wilkinson:

American Analytical Laboratories, LLC. received 1 sample(s) on 1/17/2020 for the analyses presented in the following report.

Samples were analyzed in accordance with the test procedures documented on the chain of custody and detailed throughout the text of this report. The results reported herein relate only to the items tested or to the samples as received by the laboratory. This report may not be reproduced, except in full, without the approval of American Analytical Laboratories, LLC and is not considered complete without a cover page and chain of custody documentation. The limits (LOQ) provided in the data package are analytical reporting limits and not Federal or Local mandated values to which the sample results should be compared.

There were no problems with the analyses and all data for associated QC met laboratory specifications. If there are any exceptions a Case Narrative is provided in the report or the data is qualified either on the sample results or in the QC section of the report. This package has been reviewed by American Analytical Laboratories' QA Department/Laboratory Director to comply with NELAC standards prior to report submittal.

If you have any questions regarding these tests results, please do not hesitate to call (631) 454-6100 or email me directly at lbeyer@american-analytical.com.

Sincerely,

Lori Beyer
Lab Director
American Analytical Laboratories, LLC.



American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

Workorder Sample Summary

WO#: 2001100
27-Jan-20

CLIENT: Envirotrac
Project: 101 Frost Street, Westbury, NY

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
2001100-001A	Discharge Water		1/16/2020 2:25:00 PM	1/17/2020 10:17:00 AM	Liquid

Original

CHAIN OF CUSTODY

56 Toledo Street, Farmingdale NY 11735
(T) 631-454-6100 (F) 631-454-8027

www.american-analytical.com

CERTIFICATIONS

NY ELAP - 11418 PA DEP - 68-00573
NJ DEP - NY050 CT DOH - PH-0205

[illegible]



American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
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Website: www.American-Analytical.com

Sample Log-In Check List

Client Name: ENVIROTRAC

Work Order Number: 2001100

RcptNo: 1

Logged by: Lori Beyer 1/17/2020 10:17:00 AM

Completed By: Lori Beyer 1/17/2020 10:29:10 AM

Reviewed By: Phyllis Masi 1/17/2020

Lori Beyer
Lori Beyer
Phyllis Masi

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐
4. Shipping container/cooler in good condition? Yes ☒ No ☐
Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Present ☒
No. Seal Date: Signed By:
5. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
6. Were all samples received at a temperature of >0° C to 6.0°C Yes ☒ No ☐ NA ☐
7. Sample(s) in proper container(s)? Yes ☒ No ☐
8. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
9. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
10. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
11. Is the headspace in the VOA vials less than 1/4 inch or 6 mm? Yes ☒ No ☐ No VOA Vials ☐
12. Were any sample containers received broken? Yes ☐ No ☒
13. Does paperwork match bottle labels? Yes ☒ No ☐
(Note discrepancies on chain of custody)
14. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
15. Is it clear what analyses were requested? Yes ☒ No ☐
16. Were all holding times able to be met? Yes ☒ No ☐
(If no, notify customer for authorization.)

Special Handling (if applicable)

17. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified: Jim Wilkinson

Date: 4/26/2019

By Whom: Lori Beyer

Via: ☒ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: EX-1D 625?

Client Instructions: no. 624 required.

18. Additional remarks:

Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
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American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

Case Narrative

WO#: 2001100
Date: 1/27/2020

CLIENT: Envirotrac
Project: 101 Frost Street, Westbury, NY

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846 and additional methods (EPA Method 624.1) as detailed throughout the text of the report. All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives with exceptions notated in this Narrative discussion.

Volatile LCS are analyzed with preservatives - HCL/NaHSO₄/Methanol depending on level of analysis (high/low) similar to sample analysis. Outliers can be attributed to the presence of chemical preservatives. 2-Chloroethyl vinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

The test results meet the requirements of the NYSDOH and NELAC standards, except where noted. The information contained in this analytical report is the sole property of American Analytical Laboratories, LLC. or the client for which this report was issued. The results contained in this report are only representative of the samples received. The sample receipt checklist is included as part of this lab report. Conditions can vary at different times and at different sampling conditions. American Analytical is not responsible for the use or interpretation of the data included herein.

Original



American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
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Website: www.American-Analytical.com

Definition Only

WO#: 2001100
Date: 1/27/2020

Definitions:

Sample Result and QC Summary Qualifiers - Level I and Level II Reports

ND - Not detected at the reporting limit/Limit of Quantitation

B - The analyte was detected in the associated method blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything $<5\times$ the blank value as artifact.

E - The value is above the quantitation range

D - Analyte concentration was obtained from diluted analysis or from analysis using reduced sample volume.

J - The analyte was detected below the limit of quantitation but greater than the established Limit of Detection (LOD). There is greater uncertainty associated with these results and data should be considered as estimated.

U - The compound was analyzed for but not detected.

H - Holding time for preparation or analysis has been exceeded.

S - Spike recovery is outside accepted recovery limits.

R - RPD is outside accepted recovery range.

P - Secondary column exceeds 40% difference for GC test.

* - Calibration exceeds method requirement. Due to the large number of analytes for organic testing, the method allows 10% of analytes to have %RSD and/or %D to be $>20\%$.

LOD - Limit of Detection; the lowest level the analyte can be determined to be statistically different from a blank.

LOQ - Limit of Quantitation; the lowest amount of analyte in a sample that can be quantitatively determined with suitable precision and accuracy.

PQL - Practical Quantitation Limit; the lowest level that can be reliably achieved within the specific limits of Precision and accuracy. Listed on the QC Summary Forms.

m - Analyte was manually integrated for GC/MS.

+ - Concentration exceeds regulatory level for TCLP

Original

American Analytical Laboratories, LLC.

Date: 27-Jan-20

ELAP ID : 11418

CLIENT: Envirotrac
Lab Order: 2001100
Project: 101 Frost Street, Westbury, NY
Lab ID: 2001100-001A

Client Sample ID: Discharge Water
Collection Date: 1/16/2020 2:25:00 PM
Matrix: LIQUID

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE EPA METHOD 624.1			E624.1		E624.1		Analyst: SB
cis-1,2-Dichloroethene	ND	0.50	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
1,1,1-Trichloroethane	ND	0.25	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
1,1,2,2-Tetrachloroethane	ND	0.21	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
1,1,2-Trichloroethane	ND	0.34	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
1,1-Dichloroethane	ND	0.25	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
1,1-Dichloroethene	ND	0.39	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
1,2-Dichlorobenzene	ND	0.53	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
1,2-Dichloroethane	ND	0.29	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
1,2-Dichloropropane	ND	0.26	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
1,3-Dichlorobenzene	ND	0.50	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
1,4-Dichlorobenzene	ND	0.68	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
2-Chloroethyl vinyl ether	ND	4.7	10	U	µg/L	1	1/24/2020 3:55:00 PM
Benzene	ND	0.34	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Bromodichloromethane	ND	0.22	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Bromoform	ND	0.48	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Bromomethane	ND	0.36	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Carbon tetrachloride	ND	0.98	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Chlorobenzene	ND	0.30	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Chloroethane	ND	0.23	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Chloroform	ND	0.33	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Chloromethane	ND	0.47	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
cis-1,3-Dichloropropene	ND	0.32	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Dibromochloromethane	ND	0.34	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Ethylbenzene	ND	0.52	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Methylene chloride	ND	6.9	10	U	µg/L	1	1/24/2020 3:55:00 PM
Naphthalene	ND	0.25	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Tetrachloroethene	ND	0.60	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Toluene	ND	3.4	5.0	U	µg/L	1	1/24/2020 3:55:00 PM
trans-1,2-Dichloroethene	ND	0.32	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
trans-1,3-Dichloropropene	ND	0.42	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Trichloroethene	ND	0.23	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Trichlorofluoromethane	ND	0.28	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
Vinyl chloride	ND	0.30	2.0	U	µg/L	1	1/24/2020 3:55:00 PM

American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, New York, Zip - 11735

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Original

American Analytical Laboratories, LLC.

Date: 27-Jan-20

ELAP ID : 11418**CLIENT:** Envirotrac**Client Sample ID:** Discharge Water**Lab Order:** 2001100**Collection Date:** 1/16/2020 2:25:00 PM**Project:** 101 Frost Street, Westbury, NY**Matrix:** LIQUID**Lab ID:** 2001100-001A**Certificate of Results**

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE EPA METHOD 624.1			E624.1		E624.1		Analyst: SB
Xylenes, Total	ND	3.0	6.0	U	µg/L	1	1/24/2020 3:55:00 PM
Acetone	ND	6.8	10	U	µg/L	1	1/24/2020 3:55:00 PM
m,p-Xylene	ND	1.4	4.0	U	µg/L	1	1/24/2020 3:55:00 PM
Methyl tert-butyl ether	ND	0.27	2.0	U	µg/L	1	1/24/2020 3:55:00 PM
o-Xylene	ND	54	2.0	U	µg/L	1	1/24/2020 3:55:00 PM

American Analytical Laboratories, LLC., 56 Toledo Street, Farmingdale, New York, Zip - 11735

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Original