

Via email to rob.decandia@dec.ny.gov

December 10, 2018

Mr. Robert D. DeCandia Jr. P.E
NYSDEC, Division of Environmental Remediation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7015

Re: Progress Report: November 2018
Frost Street Sites: Site ID #s 1-30043 I, L, M
New Cassel Industrial Area, Westbury, New York

Dear Mr. DeCandia:

EnSafe Inc. is pleased to submit this Progress Report for the Frost Street Sites (Site ID #s 1-30043 I, L, M) for work completed in November 2018.

Soil Vapor Extraction (SVE)/Air Sparge (AS) System Operation and Maintenance (O&M) (OU1)

- Operations continued this month, per the O&M Manual. During periodic O&M visits, system parameters were logged on dedicated O&M forms (**Appendix A**).
- The Frost Street Parties submitted a proposal for system reconfiguration/optimization to support site redevelopment efforts on September 27, 2018.
- Quantitative sampling of the SVE system granular activated carbon influent and effluent air flow was conducted on November 1, 2018, 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, cis-1,2-dichloroethene, and vinyl chloride [42,950 µg/m³]) continue to indicate significant mass extraction.
 - Effluent concentrations are below the carbon exchange indicator concentration, with the exception of cis-1,2-dichloroethene, as shown in the table below. Because the cis-1,2-dichloroethene concentration exceeds the concentration, a carbon exchanged is scheduled for early January 2019.

Frost Street Sites Effluent Compliance			
System Flow Rate =	Annual Mass Emission Limit (lbs/year)	Carbon Exchange Required Indicator Concentration ($\mu\text{g}/\text{m}^3$) ²	November 2018 Effluent Concentration ($\mu\text{g}/\text{m}^3$)
Compound			
Trichloroethene	500	19,000	1
Tetrachloroethene	1,000	38,000	8.81
Vinyl Chloride	100	3,800	ND
Cis-1,2-Dichloroethene ¹	100	3,800	4,680

Notes:

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

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

Groundwater Extraction/Hydraulic Containment System Installation (OU2)

Discharge permit compliance samples were collected on November 16, 2018; results were within permit limits and will be submitted to Nassau County in a forthcoming semi-annual compliance report. At this time, individual samples were also collected from each extraction well and analyzed for VOCs; a summary of the detected values is provided below, full results are provided in **Appendix C**.

Groundwater Extraction System					
Individual Extraction Well Data – Volatile Organic Compounds – November 16, 2018 (ppb)					
Analyte	EX-1A	EX-1B	EX-1C	EX-1D	
1,1-Dichloroethene	No sample; pump off.		ND	ND	0.97 J
Carbon Tetrachloride			ND	ND	0.37 J
Chloroform			ND	ND	0.46 J
Tetrachloroethene		180 D		43	16
Trichloroethene			5	2.1	8.7
Total VOCs	NA		185	45.1	26.5

Currently, the pumps in EX-1B, EX-1C, and EX-1D are operating near design flow rates. The pump in EX-1A malfunctioned in August; the repair and/or replacement of this pump will be determined pending NYSDEC approval of the *Expanded Pumping Test Summary, Findings, and Recommendations*, submitted on August 10, 2018.

Groundwater Monitoring

- The third quarter 2018 groundwater sampling event was performed the week of September 24, 2018; this sampling event included collection of quarterly samples for routine VOC analysis as well as emerging contaminant analysis from select wells in accordance with the NYSDEC

approved work plan. The data was submitted to NYSDEC on December 6, 2018; the report will be submitted once complete.

- The fourth quarter 2018 sampling event is scheduled for the week of December 10, 2018.

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
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T. Mongelli, U.S. EPA
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Appendix A
SVE/AS System O&M Logs

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: 1-Nov
Weather / Temp: Clear / 60 DEG
Technician / Operator: JW

Arrival Time: 13:00
Departure Time: 14:00

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)	4700	923	Blower 1 Total Runtime (hrs)	52,400.8	
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	52,113.3	
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0	
Moisture Separator Vacuum ("Hg)	3.5		Blower 2 Air Filter Differential Pressure ("H2O)	0	
VGAC-1 Influent Vacuum ("H2O)	40		VGAC-1 Influent PID (ppm)	2.1	
VGAC-1 Effluent Vacuum ("H2O)	45		VGAC-1 Effluent PID (ppm)	0.0	
VGAC-2 Influent Vacuum ("H2O)	40		VGAC-2 Influent PID (ppm)	2.1	
VGAC-2 Effluent Vacuum ("H2O)	45		VGAC-2 Effluent PID (ppm)	0.0	
VGAC-3 Influent Pressure ("H2O)	50		VGAC-3 Influent PID (ppm)	0.0	
VGAC-3 Effluent Pressure ("H2O)	60		VGAC-3 Effluent PID (ppm)	0.0	
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0	
Blower Effluent Pressure ("H2O)	10				
Transfer Pump Total Runtime (hrs)	25,033.0		Condensate Storage Tank Level (gal)	0	
SVE Manifold Legs - Vacuum/Flow Rate/PID					
	Vacuum	Velocity	Flow Rate	PID	
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	48	7000	153	6.5	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	50	4500	98	0.0	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	42	5200	113	0.0	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	40	4200	92	0.0	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)
Air Sparge System					
Compressor 1 Pressure (psi)	Off for repairs		Compressor 2 Pressure (psi)	89	
Compressor 1 Temperature (degF)	Off for repairs		Compressor 2 Temperature (degF)	196	
Compressor 1 Runtime (hrs)	27,317		Compressor 2 Runtime (hrs)	29,701	
Manifold Regulator Pressure (psi)	75				
AS Manifold Legs - Pressure/Flow Rate					
	Pressure	Flow Rate		Pressure	Flow Rate
AS-1 (psi)/(cfm)	15	10	AS-11 (psi)/(cfm)	14	4
AS-2 (psi)/(cfm)	14	5	AS-12B (psi)/(cfm)	15	10
AS-3 (psi)/(cfm)	14	8	AS-13B (psi)/(cfm)	13	10
AS-4 (psi)/(cfm)	14	6	AS-14 (psi)/(cfm)	14	8
AS-5 (psi)/(cfm)	15	9	AS-15 (psi)/(cfm)	14	10
AS-6 (psi)/(cfm)	14	9	AS-16B (psi)/(cfm)	14	9
AS-7 (psi)/(cfm)	14	5	AS-17 (psi)/(cfm)	14	6
AS-8 (psi)/(cfm)	14	10	AS-18 (psi)/(cfm)	13	7
AS-9 (psi)/(cfm)	14	7	AS-19 (psi)/(cfm)	13	5
AS-10B (psi)/(cfm)	13	10			

Notes, Comments & Observations: _____

Collected monthly samples.

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: 6-Nov
Weather / Temp: Clear / 60 DEG
Technician / Operator: JW

Arrival Time: 14:00
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)	4700	923	Blower 1 Total Runtime (hrs)	52,463.5	
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	52,166.4	
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0	
Moisture Separator Vacuum ("Hg)	3.5		Blower 2 Air Filter Differential Pressure ("H2O)	0	
VGAC-1 Influent Vacuum ("H2O)	40		VGAC-1 Influent PID (ppm)	2.4	
VGAC-1 Effluent Vacuum ("H2O)	45		VGAC-1 Effluent PID (ppm)	0.0	
VGAC-2 Influent Vacuum ("H2O)	40		VGAC-2 Influent PID (ppm)	2.4	
VGAC-2 Effluent Vacuum ("H2O)	45		VGAC-2 Effluent PID (ppm)	0.0	
VGAC-3 Influent Pressure ("H2O)	50		VGAC-3 Influent PID (ppm)	0.0	
VGAC-3 Effluent Pressure ("H2O)	60		VGAC-3 Effluent PID (ppm)	0.0	
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0	
Blower Effluent Pressure ("H2O)	10				
Transfer Pump Total Runtime (hrs)	25,033.0		Condensate Storage Tank Level (gal)	0	
SVE Manifold Legs - Vacuum/Flow Rate/PID					
	Vacuum	Velocity	Flow Rate	PID	
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	50	7000	153	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	40
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	50	4500	98	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	40
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	42	5200	113	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	40
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	40	4200	92	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	40
Air Sparge System					
Compressor 1 Pressure (psi)	Off for repairs		Compressor 2 Pressure (psi)	89	
Compressor 1 Temperature (degF)	Off for repairs		Compressor 2 Temperature (degF)	196	
Compressor 1 Runtime (hrs)	27,317		Compressor 2 Runtime (hrs)	29,816	
Manifold Regulator Pressure (psi)	75				
AS Manifold Legs - Pressure/Flow Rate					
	Pressure	Flow Rate		Pressure	Flow Rate
AS-1 (psi)/(cfm)	15	10	AS-11 (psi)/(cfm)	14	4
AS-2 (psi)/(cfm)	14	5	AS-12B (psi)/(cfm)	15	10
AS-3 (psi)/(cfm)	14	8	AS-13B (psi)/(cfm)	13	10
AS-4 (psi)/(cfm)	14	6	AS-14 (psi)/(cfm)	14	7
AS-5 (psi)/(cfm)	15	10	AS-15 (psi)/(cfm)	14	10
AS-6 (psi)/(cfm)	14	10	AS-16B (psi)/(cfm)	14	9
AS-7 (psi)/(cfm)	14	5	AS-17 (psi)/(cfm)	14	6
AS-8 (psi)/(cfm)	14	10	AS-18 (psi)/(cfm)	13	7
AS-9 (psi)/(cfm)	14	7	AS-19 (psi)/(cfm)	13	4
AS-10B (psi)/(cfm)	13	10			

Notes, Comments & Observations: _____

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: 14-Nov
Weather / Temp: Clear / 40 DEG
Technician / Operator: JW

Arrival Time: 10:00
Departure Time: 11:00

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)	4700	923	Blower 1 Total Runtime (hrs)	52,563.9	
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	52,251.3	
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0	
Moisture Separator Vacuum ("Hg)	3.5		Blower 2 Air Filter Differential Pressure ("H2O)	0	
VGAC-1 Influent Vacuum ("H2O)	40		VGAC-1 Influent PID (ppm)	2.0	
VGAC-1 Effluent Vacuum ("H2O)	45		VGAC-1 Effluent PID (ppm)	0.0	
VGAC-2 Influent Vacuum ("H2O)	40		VGAC-2 Influent PID (ppm)	2.0	
VGAC-2 Effluent Vacuum ("H2O)	45		VGAC-2 Effluent PID (ppm)	0.0	
VGAC-3 Influent Pressure ("H2O)	50		VGAC-3 Influent PID (ppm)	0.0	
VGAC-3 Effluent Pressure ("H2O)	60		VGAC-3 Effluent PID (ppm)	0.0	
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0	
Blower Effluent Pressure ("H2O)	10				
Transfer Pump Total Runtime (hrs)	25,033.0		Condensate Storage Tank Level (gal)	0	
SVE Manifold Legs - Vacuum/Flow Rate/PID					
	Vacuum	Velocity	Flow Rate	PID	
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	50	7500	164	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	42
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	52	4500	98	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	43
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	44	5200	113	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	42
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	42	4300	94	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	44
Air Sparge System					
Compressor 1 Pressure (psi)	Off for repairs		Compressor 2 Pressure (psi)	95	
Compressor 1 Temperature (degF)	Off for repairs		Compressor 2 Temperature (degF)	181	
Compressor 1 Runtime (hrs)	27,317		Compressor 2 Runtime (hrs)	30,002	
Manifold Regulator Pressure (psi)	80				
AS Manifold Legs - Pressure/Flow Rate					
	Pressure	Flow Rate		Pressure	Flow Rate
AS-1 (psi)/(cfm)	16	10	AS-11 (psi)/(cfm)	15	4
AS-2 (psi)/(cfm)	15	6	AS-12B (psi)/(cfm)	15	7
AS-3 (psi)/(cfm)	15	5	AS-13B (psi)/(cfm)	13	10
AS-4 (psi)/(cfm)	13	8	AS-14 (psi)/(cfm)	14	9
AS-5 (psi)/(cfm)	15	5	AS-15 (psi)/(cfm)	15	9
AS-6 (psi)/(cfm)	15	7	AS-16B (psi)/(cfm)	13	9
AS-7 (psi)/(cfm)	15	4	AS-17 (psi)/(cfm)	14	4
AS-8 (psi)/(cfm)	15	9	AS-18 (psi)/(cfm)	13	5
AS-9 (psi)/(cfm)	15	5	AS-19 (psi)/(cfm)	13	4
AS-10B (psi)/(cfm)	13	9			

Notes, Comments & Observations: _____

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: 19-Nov
Weather / Temp: Clear / 50 DEG
Technician / Operator: JW

Arrival Time: 10:00
Departure Time: 11:00

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)	4650	913	Blower 1 Total Runtime (hrs)	52,625.2	
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	52,257.5	
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0	
Moisture Separator Vacuum ("Hg)	3.5		Blower 2 Air Filter Differential Pressure ("H2O)	0	
VGAC-1 Influent Vacuum ("H2O)	40		VGAC-1 Influent PID (ppm)	2.0	
VGAC-1 Effluent Vacuum ("H2O)	45		VGAC-1 Effluent PID (ppm)	0.0	
VGAC-2 Influent Vacuum ("H2O)	40		VGAC-2 Influent PID (ppm)	2.0	
VGAC-2 Effluent Vacuum ("H2O)	45		VGAC-2 Effluent PID (ppm)	0.0	
VGAC-3 Influent Pressure ("H2O)	50		VGAC-3 Influent PID (ppm)	0.0	
VGAC-3 Effluent Pressure ("H2O)	60		VGAC-3 Effluent PID (ppm)	0.0	
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0	
Blower Effluent Pressure ("H2O)	10				
Transfer Pump Total Runtime (hrs)	25,033.0		Condensate Storage Tank Level (gal)	0	
SVE Manifold Legs - Vacuum/Flow Rate/PID					
	Vacuum	Velocity	Flow Rate	PID	
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	50	7500	164	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	42
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	52	4500	98	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	43
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	44	5200	113	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	42
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	42	4300	94	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	44
Air Sparge System					
Compressor 1 Pressure (psi)	Off for repairs		Compressor 2 Pressure (psi)	93	
Compressor 1 Temperature (degF)	Off for repairs		Compressor 2 Temperature (degF)	198	
Compressor 1 Runtime (hrs)	27,317		Compressor 2 Runtime (hrs)	30,070	
Manifold Regulator Pressure (psi)	80				
AS Manifold Legs - Pressure/Flow Rate					
	Pressure	Flow Rate		Pressure	Flow Rate
AS-1 (psi)/(cfm)	15	9	AS-11 (psi)/(cfm)	15	4
AS-2 (psi)/(cfm)	15	6	AS-12B (psi)/(cfm)	15	7
AS-3 (psi)/(cfm)	14	9	AS-13B (psi)/(cfm)	13	10
AS-4 (psi)/(cfm)	15	8	AS-14 (psi)/(cfm)	14	10
AS-5 (psi)/(cfm)	15	8	AS-15 (psi)/(cfm)	15	10
AS-6 (psi)/(cfm)	15	10	AS-16B (psi)/(cfm)	13	10
AS-7 (psi)/(cfm)	15	4	AS-17 (psi)/(cfm)	14	5
AS-8 (psi)/(cfm)	15	9	AS-18 (psi)/(cfm)	13	5
AS-9 (psi)/(cfm)	15	5	AS-19 (psi)/(cfm)	13	4
AS-10B (psi)/(cfm)	13	9			

Notes, Comments & Observations: _____

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: 30-Nov
Weather / Temp: Clear / 45 DEG
Technician / Operator: JW

Arrival Time: 9:00
Departure Time: 12:00

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)	4600	903	Blower 1 Total Runtime (hrs)	52,757.6	
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	52,259.3	
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)	58		VGAC-1 Influent PID (ppm)	5.9	
VGAC-1 Effluent Vacuum ("H2O)	52		VGAC-1 Effluent PID (ppm)	0.0	
VGAC-2 Influent Vacuum ("H2O)	55		VGAC-2 Influent PID (ppm)	5.9	
VGAC-2 Effluent Vacuum ("H2O)	47		VGAC-2 Effluent PID (ppm)	0.0	
VGAC-3 Influent Pressure ("H2O)	10		VGAC-3 Influent PID (ppm)	0.0	
VGAC-3 Effluent Pressure ("H2O)	5		VGAC-3 Effluent PID (ppm)	0.0	
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0	
Blower Effluent Pressure ("H2O)	20				
Transfer Pump Total Runtime (hrs)	25,033.0		Condensate Storage Tank Level (gal)	200	
SVE Manifold Legs - Vacuum/Flow Rate/PID					
	Vacuum	Velocity	Flow Rate	PID	
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	55	7500	164	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	46
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	56	4500	98	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	46
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	48	5500	120	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	44
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	46	4600	100	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	46
Air Sparge System					
Compressor 1 Pressure (psi)	Off for repairs		Compressor 2 Pressure (psi)	93	
Compressor 1 Temperature (degF)	Off for repairs		Compressor 2 Temperature (degF)	188	
Compressor 1 Runtime (hrs)	27,317		Compressor 2 Runtime (hrs)	30,204	
Manifold Regulator Pressure (psi)	80				
AS Manifold Legs - Pressure/Flow Rate					
	Pressure	Flow Rate		Pressure	Flow Rate
AS-1 (psi)/(cfm)	15	10	AS-11 (psi)/(cfm)	15	4
AS-2 (psi)/(cfm)	15	6	AS-12B (psi)/(cfm)	15	7
AS-3 (psi)/(cfm)	14	9	AS-13B (psi)/(cfm)	13	10
AS-4 (psi)/(cfm)	15	8	AS-14 (psi)/(cfm)	14	10
AS-5 (psi)/(cfm)	15	10	AS-15 (psi)/(cfm)	15	10
AS-6 (psi)/(cfm)	15	10	AS-16B (psi)/(cfm)	13	10
AS-7 (psi)/(cfm)	15	4	AS-17 (psi)/(cfm)	14	5
AS-8 (psi)/(cfm)	15	9	AS-18 (psi)/(cfm)	13	5
AS-9 (psi)/(cfm)	15	5	AS-19 (psi)/(cfm)	13	4
AS-10B (psi)/(cfm)	13	9			

Notes, Comments & Observations:

Moved GAC-3 to pressure side of blower, performed semi-annual blower maintenance.

Appendix B
SVE System Influent/Effluent Sampling (TO-15)
Laboratory Analytical Results



Saturday, November 10, 2018

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

Project ID: ENSAFE-WESTBURY
Sample ID#s: CB88487 - CB88488

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 have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

A handwritten signature in black ink that reads "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

Analysis Report

November 10, 2018

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

Sample Information

Matrix: AIR
Location Code: ENVIROTR
Rush Request: 72 Hour
P.O.#:
Canister Id: 739
Project ID: ENSAFE-WESTBURY
Client ID: SVE INFLUENT

Custody Information

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

Date

Time

11/01/18

13:46

11/05/18

16:35

SDG ID: GCB88487

Phoenix ID: CB88487

Laboratory Data

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	11/06/18	KCA	1
1,1,1-Trichloroethane	1.16	0.183	6.33	1.00	11/06/18	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	11/06/18	KCA	1
1,1,2-Trichloroethane	ND	0.183	ND	1.00	11/06/18	KCA	1
1,1-Dichloroethane	ND	0.247	ND	1.00	11/06/18	KCA	1
1,1-Dichloroethene	0.136	0.051	0.54	0.20	11/06/18	KCA	1
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	11/06/18	KCA	1
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	11/06/18	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	11/06/18	KCA	1
1,2-Dichlorobenzene	ND	0.166	ND	1.00	11/06/18	KCA	1
1,2-Dichloroethane	ND	0.247	ND	1.00	11/06/18	KCA	1
1,2-dichloropropane	ND	0.217	ND	1.00	11/06/18	KCA	1
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	11/06/18	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	11/06/18	KCA	1
1,3-Butadiene	ND	0.452	ND	1.00	11/06/18	KCA	1
1,3-Dichlorobenzene	ND	0.166	ND	1.00	11/06/18	KCA	1
1,4-Dichlorobenzene	ND	0.166	ND	1.00	11/06/18	KCA	1
1,4-Dioxane	ND	0.278	ND	1.00	11/06/18	KCA	1
2-Hexanone(MBK)	ND	0.244	ND	1.00	11/06/18	KCA	1
4-Ethyltoluene	ND	0.204	ND	1.00	11/06/18	KCA	1
4-Isopropyltoluene	ND	0.182	ND	1.00	11/06/18	KCA	1
4-Methyl-2-pentanone(MIBK)	ND	0.244	ND	1.00	11/06/18	KCA	1
Acetone	6.11	0.421	14.5	1.00	11/06/18	KCA	1
Acrylonitrile	ND	0.461	ND	1.00	11/06/18	KCA	1
Benzene	ND	0.313	ND	1.00	11/06/18	KCA	1
Benzyl chloride	ND	0.193	ND	1.00	11/06/18	KCA	1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	ND	1.00	11/06/18	KCA	1
Bromoform	ND	0.097	ND	1.00	11/06/18	KCA	1
Bromomethane	ND	0.258	ND	1.00	11/06/18	KCA	1
Carbon Disulfide	ND	0.321	ND	1.00	11/06/18	KCA	1
Carbon Tetrachloride	0.076	0.032	0.48	0.20	11/06/18	KCA	1
Chlorobenzene	0.329	0.217	1.51	1.00	11/06/18	KCA	1
Chloroethane	ND	0.379	ND	1.00	11/06/18	KCA	1
Chloroform	ND	0.205	ND	1.00	11/06/18	KCA	1
Chloromethane	ND	0.485	ND	1.00	11/06/18	KCA	1
Cis-1,2-Dichloroethene	294	3.79	1160	15.0	11/07/18	KCA	75
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	11/06/18	KCA	1
Cyclohexane	ND	0.291	ND	1.00	11/06/18	KCA	1
Dibromochloromethane	ND	0.118	ND	1.00	11/06/18	KCA	1
Dichlorodifluoromethane	0.558	0.202	2.76	1.00	11/06/18	KCA	1
Ethanol	1.86	0.531	3.50	1.00	11/06/18	KCA	1
Ethyl acetate	ND	0.278	ND	1.00	11/06/18	KCA	1
Ethylbenzene	ND	0.230	ND	1.00	11/06/18	KCA	1
Heptane	ND	0.244	ND	1.00	11/06/18	KCA	1
Hexachlorobutadiene	ND	0.094	ND	1.00	11/06/18	KCA	1
Hexane	ND	0.284	ND	1.00	11/06/18	KCA	1
Isopropylalcohol	1.01	0.407	2.48	1.00	11/06/18	KCA	1
Isopropylbenzene	ND	0.204	ND	1.00	11/06/18	KCA	1
m,p-Xylene	ND	0.230	ND	1.00	11/06/18	KCA	1
Methyl Ethyl Ketone	2.46	0.339	7.25	1.00	11/06/18	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	11/06/18	KCA	1
Methylene Chloride	ND	0.864	ND	3.00	11/06/18	KCA	1
n-Butylbenzene	ND	0.182	ND	1.00	11/06/18	KCA	1
o-Xylene	ND	0.230	ND	1.00	11/06/18	KCA	1
Propylene	ND	0.581	ND	1.00	11/06/18	KCA	1
sec-Butylbenzene	ND	0.182	ND	1.00	11/06/18	KCA	1
Styrene	ND	0.235	ND	1.00	11/06/18	KCA	1
Tetrachloroethene	5820	5.53	39400	37.5	11/08/18	KCA	150
Tetrahydrofuran	0.734	0.339	2.16	1.00	11/06/18	KCA	1
Toluene	ND	0.266	ND	1.00	11/06/18	KCA	1
Trans-1,2-Dichloroethene	4.96	0.252	19.7	1.00	11/06/18	KCA	1
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	11/06/18	KCA	1
Trichloroethene	445	2.79	2390	15.0	11/07/18	KCA	75
Trichlorofluoromethane	0.453	0.178	2.54	1.00	11/06/18	KCA	1
Trichlorotrifluoroethane	ND	0.131	ND	1.00	11/06/18	KCA	1
Vinyl Chloride	ND	0.078	ND	0.20	11/06/18	KCA	1
<u>QA/QC Surrogates</u>							
% Bromofluorobenzene	107	%	107	%	11/06/18	KCA	1

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.

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 there are any questions regarding this data, please call Phoenix Client Services.

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Phyllis Shiller

Phyllis Shiller, Laboratory Director

November 10, 2018

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

November 10, 2018

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

Sample Information

Matrix: AIR
Location Code: ENVIROTR
Rush Request: 72 Hour
P.O.#:
Canister Id: 774
Project ID: ENSAFE-WESTBURY
Client ID: SVE EFFLUENT

Custody Information

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

Date

Time

11/01/18

13:41

11/05/18

16:35

SDG ID: GCB88487

Phoenix ID: CB88488

Laboratory Data

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	11/06/18	KCA	1
1,1,1-Trichloroethane	0.231	0.183	1.26	1.00	11/06/18	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	11/06/18	KCA	1
1,1,2-Trichloroethane	ND	0.183	ND	1.00	11/06/18	KCA	1
1,1-Dichloroethane	0.305	0.247	1.23	1.00	11/06/18	KCA	1
1,1-Dichloroethene	0.498	0.051	1.97	0.20	11/06/18	KCA	1
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	11/06/18	KCA	1
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	11/06/18	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	11/06/18	KCA	1
1,2-Dichlorobenzene	ND	0.166	ND	1.00	11/06/18	KCA	1
1,2-Dichloroethane	ND	0.247	ND	1.00	11/06/18	KCA	1
1,2-dichloropropane	ND	0.217	ND	1.00	11/06/18	KCA	1
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	11/06/18	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	11/06/18	KCA	1
1,3-Butadiene	ND	0.452	ND	1.00	11/06/18	KCA	1
1,3-Dichlorobenzene	ND	0.166	ND	1.00	11/06/18	KCA	1
1,4-Dichlorobenzene	ND	0.166	ND	1.00	11/06/18	KCA	1
1,4-Dioxane	ND	0.278	ND	1.00	11/06/18	KCA	1
2-Hexanone(MBK)	ND	0.244	ND	1.00	11/06/18	KCA	1
4-Ethyltoluene	ND	0.204	ND	1.00	11/06/18	KCA	1
4-Isopropyltoluene	ND	0.182	ND	1.00	11/06/18	KCA	1
4-Methyl-2-pentanone(MIBK)	ND	0.244	ND	1.00	11/06/18	KCA	1
Acetone	5.02	0.421	11.9	1.00	11/06/18	KCA	1
Acrylonitrile	ND	0.461	ND	1.00	11/06/18	KCA	1
Benzene	ND	0.313	ND	1.00	11/06/18	KCA	1
Benzyl chloride	ND	0.193	ND	1.00	11/06/18	KCA	1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	ND	1.00	11/06/18	KCA	1
Bromoform	ND	0.097	ND	1.00	11/06/18	KCA	1
Bromomethane	ND	0.258	ND	1.00	11/06/18	KCA	1
Carbon Disulfide	ND	0.321	ND	1.00	11/06/18	KCA	1
Carbon Tetrachloride	ND	0.032	ND	0.20	11/06/18	KCA	1
Chlorobenzene	ND	0.217	ND	1.00	11/06/18	KCA	1
Chloroethane	ND	0.379	ND	1.00	11/06/18	KCA	1
Chloroform	1.69	0.205	8.25	1.00	11/06/18	KCA	1
Chloromethane	ND	0.485	ND	1.00	11/06/18	KCA	1
Cis-1,2-Dichloroethene	1180	3.79	4680	15.0	11/07/18	KCA	75
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	11/06/18	KCA	1
Cyclohexane	ND	0.291	ND	1.00	11/06/18	KCA	1
Dibromochloromethane	ND	0.118	ND	1.00	11/06/18	KCA	1
Dichlorodifluoromethane	0.554	0.202	2.74	1.00	11/06/18	KCA	1
Ethanol	1.89	0.531	3.56	1.00	11/06/18	KCA	1
Ethyl acetate	ND	0.278	ND	1.00	11/06/18	KCA	1
Ethylbenzene	ND	0.230	ND	1.00	11/06/18	KCA	1
Heptane	ND	0.244	ND	1.00	11/06/18	KCA	1
Hexachlorobutadiene	ND	0.094	ND	1.00	11/06/18	KCA	1
Hexane	ND	0.284	ND	1.00	11/06/18	KCA	1
Isopropylalcohol	2.94	0.407	7.22	1.00	11/06/18	KCA	1
Isopropylbenzene	ND	0.204	ND	1.00	11/06/18	KCA	1
m,p-Xylene	ND	0.230	ND	1.00	11/06/18	KCA	1
Methyl Ethyl Ketone	1.11	0.339	3.27	1.00	11/06/18	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	11/06/18	KCA	1
Methylene Chloride	ND	0.864	ND	3.00	11/06/18	KCA	1
n-Butylbenzene	ND	0.182	ND	1.00	11/06/18	KCA	1
o-Xylene	ND	0.230	ND	1.00	11/06/18	KCA	1
Propylene	ND	0.581	ND	1.00	11/06/18	KCA	1
sec-Butylbenzene	ND	0.182	ND	1.00	11/06/18	KCA	1
Styrene	ND	0.235	ND	1.00	11/06/18	KCA	1
Tetrachloroethene	1.30	0.037	8.81	0.25	11/06/18	KCA	1
Tetrahydrofuran	5.74	0.339	16.9	1.00	11/06/18	KCA	1
Toluene	ND	0.266	ND	1.00	11/06/18	KCA	1
Trans-1,2-Dichloroethene	13.2	0.252	52.3	1.00	11/06/18	KCA	1
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	11/06/18	KCA	1
Trichloroethene	0.187	0.037	1.00	0.20	11/06/18	KCA	1
Trichlorofluoromethane	1.36	0.178	7.64	1.00	11/06/18	KCA	1
Trichlorotrifluoroethane	14.7	0.131	113	1.00	11/06/18	KCA	1
Vinyl Chloride	ND	0.078	ND	0.20	11/06/18	KCA	1
<u>QA/QC Surrogates</u>							
% Bromofluorobenzene	92	%	92	%	11/06/18	KCA	1

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.

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 there are any questions regarding this data, please call Phoenix Client Services.

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Phyllis Shiller

Phyllis Shiller, Laboratory Director

November 10, 2018

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

QA/QC Report

November 10, 2018

QA/QC Data

SDG I.D.: GCB88487

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 455271 (ppbv), QC Sample No: CB88060 (CB88487, CB88488)												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.055	ND	0.38	104	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.500	ND	2.73	105	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.031	ND	0.21	107	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.033	ND	0.18	103	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.450	ND	1.82	103	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.500	ND	1.98	105	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.280	ND	2.08	118	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.500	ND	2.46	113	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.050	ND	0.38	104	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.500	ND	3.00	115	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.050	ND	0.20	107	0.55	0.51	0.135	0.127	NC	70 - 130	25
1,2-dichloropropane	ND	0.061	ND	0.28	125	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.500	ND	3.49	106	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.500	ND	2.46	111	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.043	ND	0.10	105	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.500	ND	3.00	110	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.043	ND	0.26	110	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.160	ND	0.58	121	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.500	ND	2.05	116	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.500	ND	2.46	112	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.500	ND	2.74	111	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.500	ND	2.05	116	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	1.00	ND	2.37	101	8.31 S	7.81 S	3.50 S	3.29 S	NC	70 - 130	25
Acrylonitrile	ND	0.500	ND	1.08	104	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.041	ND	0.13	103	0.52	ND	0.164	ND	NC	70 - 130	25
Benzyl chloride	ND	0.048	ND	0.25	120	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.037	ND	0.25	125	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.500	ND	5.17	108	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.500	ND	1.94	99	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.500	ND	1.56	103	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.008	ND	0.05	105	0.54	0.54	0.086	0.086	0.0	70 - 130	25
Chlorobenzene	ND	0.500	ND	2.30	111	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.500	ND	1.32	113	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.051	ND	0.25	109	ND	ND	ND	ND	NC	70 - 130	25
Chloromethane	ND	0.500	ND	1.03	97	ND	ND	ND	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.150	ND	0.68	129	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.500	ND	1.72	110	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.500	ND	4.26	106	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.500	ND	2.47	114	33.8	33.5	6.83	6.77	0.9	70 - 130	25
Ethanol	ND	0.500	ND	0.94	121	7.42	6.53	3.94	3.47	12.7	70 - 130	25
Ethyl acetate	ND	0.500	ND	1.80	101	ND	ND	ND	ND	NC	70 - 130	25

QA/QC Data

SDG I.D.: GCB88487

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
Ethylbenzene	ND	0.250	ND	1.08	110	ND	ND	ND	ND	NC	70 - 130	25
Heptane	ND	0.500	ND	2.05	119	ND	ND	ND	ND	NC	70 - 130	25
Hexachlorobutadiene	ND	0.035	ND	0.37	108	ND	ND	ND	ND	NC	70 - 130	25
Hexane	ND	0.500	ND	1.76	120	ND	ND	ND	ND	NC	70 - 130	25
Isopropylalcohol	ND	0.500	ND	1.23	102	ND	ND	ND	ND	NC	70 - 130	25
Isopropylbenzene	ND	0.500	ND	2.46	110	ND	ND	ND	ND	NC	70 - 130	25
m,p-Xylene	ND	1.00	ND	4.34	110	ND	ND	ND	ND	NC	70 - 130	25
Methyl Ethyl Ketone	ND	0.500	ND	1.47	104	ND	ND	ND	ND	NC	70 - 130	25
Methyl tert-butyl ether(MTBE)	ND	0.500	ND	1.80	109	ND	ND	ND	ND	NC	70 - 130	25
Methylene Chloride	ND	0.500	ND	1.74	98	ND	ND	ND	ND	NC	70 - 130	25
n-Butylbenzene	ND	0.500	ND	2.74	104	ND	ND	ND	ND	NC	70 - 130	25
o-Xylene	ND	0.500	ND	2.17	110	ND	ND	ND	ND	NC	70 - 130	25
Propylene	ND	0.500	ND	0.86	104	ND	ND	ND	ND	NC	70 - 130	25
sec-Butylbenzene	ND	0.500	ND	2.74	106	ND	ND	ND	ND	NC	70 - 130	25
Styrene	ND	0.500	ND	2.13	108	ND	ND	ND	ND	NC	70 - 130	25
Tetrachloroethene	ND	0.093	ND	0.63	102	ND	ND	ND	ND	NC	70 - 130	25
Tetrahydrofuran	ND	0.500	ND	1.47	98	ND	ND	ND	ND	NC	70 - 130	25
Toluene	ND	0.500	ND	1.88	118	ND	ND	ND	ND	NC	70 - 130	25
Trans-1,2-Dichloroethene	ND	0.500	ND	1.98	104	ND	ND	ND	ND	NC	70 - 130	25
trans-1,3-Dichloropropene	ND	0.150	ND	0.68	112	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.037	ND	0.20	111	ND	ND	ND	ND	NC	70 - 130	25
Trichlorofluoromethane	ND	0.500	ND	2.81	106	ND	ND	ND	ND	NC	70 - 130	25
Trichlorotrifluoroethane	ND	0.500	ND	3.83	100	ND	ND	ND	ND	NC	70 - 130	25
Vinyl Chloride	ND	0.043	ND	0.11	105	ND	ND	ND	ND	NC	70 - 130	25
% Bromofluorobenzene	98		98		94	105	87	105	87	NC	70 - 130	25

QA/QC Batch 455282 (ppbv), QC Sample No: CB89493 (CB88487 (75X) , CB88488 (75X))

Volatiles

Cis-1,2-Dichloroethene	ND	0.050	ND	0.20	115	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.037	ND	0.20	103	ND	ND	ND	ND	NC	70 - 130	25

QA/QC Batch 455632 (ppbv), QC Sample No: CB90610 (CB88487 (150X))

Volatiles

Tetrachloroethene	ND	0.500	ND	3.39	100	46.0	46.2	6.78	6.82	0.6	70 - 130	25
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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
November 10, 2018

Saturday, November 10, 2018

Criteria: None

State: NY

Sample Criteria Exceedances Report

GCB88487 - ENVIROTR

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
*** 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 exceedances. 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

November 10, 2018

SDG I.D.: GCB88487

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

Appendix C
Groundwater Extraction System Analytical Data



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

November 21, 2018

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

RE: Frost Street OU2; 101 Frost Street, Westbury Order No.: 181115

Dear Jim Wilkinson:

American Analytical Laboratories, LLC. received 3 sample(s) on 11/16/2018 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,

Tom Beyer

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#: 1811115
21-Nov-18

CLIENT: Envirotrac
Project: Frost Street OU2; 101 Frost Street, Westbury, N

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1811115-001A	EX-1B		11/16/2018 9:00:00 AM	11/16/2018 1:01:57 PM	Liquid
1811115-002A	EX-1C		11/16/2018 9:00:00 AM	11/16/2018 1:01:57 PM	Liquid
1811115-003A	EX-1D		11/16/2018 9:00:00 AM	11/16/2018 1:01:57 PM	Liquid

Original



CHAIN OF CUSTODY

56 Toledo Street, Farmingdale NY 11117-335
(T) 631-454-6100 (F) 631-454-8027
www.american-analytical.com

CERTIFICATIONS

NYDEP-1114188 RADEP-68-00572
NYDEP- NY0580 QTD0H-PAH0205

Client Information				Project Information				Analytical Information							
Company Name EnviroTrac	Address 5 Old Dock Road	City Yaphank	State NY	Zip 11980	Project Name Frost Street GWL2	Street 101 Frost Street	City Westbury	State NY	Zip 11791						
Project Contact Jim Wilkinson	Phone # 631-924-3001	E-mail jamesw@envirotrac.com	Project #				Sampler's Name / Company								
								Sampler's Signature							
LAB SAMPLE # (LAB USE ONLY)	Sample Information			Sample Collection			Sample Containers								
	Client Sample ID	Sample Type	Matrix Code	Date	Time	Glass / Plastic	Total # of bottles	Number of Each Preserved Bottle							
181111S-001	EX-1B	G	L	11/16	9:00	GL		3	3						
181111S-002	EX-16	G	L			GL	3	3							VOCS - EPA 624
181111S-003	EX-1B	G	L			GL	3	3							VOCS - EPA 624
	Combined Effluent	G	L			GL	2	1	1						Total Platinum, Copper, Chromium, Nickel, Iron, Zinc, Hex Chromium
	Combined Effluent	G	L			GL	1	3	3						VOCS - EPA 624
Turnaround Time (Business Days)				SAMPLE TYPE		MATRIX CODES						Comments / Remarks			
<input checked="" type="checkbox"/> Standard	3 Day RUSH		L = Liquid						PC = Paint Chip						
<input type="checkbox"/> 7-10 Business Days	2 Day RUSH		S = Soil						SL = Sludge						
<input type="checkbox"/> 3 Day RUSH	1 Day RUSH		O = Oil						SD = Solid						
<input type="checkbox"/> 4 Day RUSH															

Sample: *Quis custodiet ipsos qui libentibus libet? - search for mass surveillance with a timestamp date and time*

Sample custody trustee documented below, each time samples change possession, with a signature, date, and time.



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: **1811115** RcptNo: **1**

Logged by:	Lori Beyer	11/16/2018 1:01:57 PM	<i>Lori Beyer</i>
Completed By:	Lori Beyer	11/16/2018 1:04:12 PM	<i>Lori Beyer</i>
Reviewed By:	Phyllis Masi	11/16/2018	<i>Phyllis Masi</i>

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?
(Note discrepancies on chain of custody) Yes No
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?
(If no, notify customer for authorization.) Yes No

Special Handling (if applicable)

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

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

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#: 1811115
Date: 11/21/2018

CLIENT: Envirotrac
Project: Frost Street OU2; 101 Frost Street, Westbury, N

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

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846 and additional EPA methods as detailed throughout the text of the report. All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives with exceptions noted 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

TEL: (631) 454-6100 FAX: (631) 454-8027

Website: www.American-Analytical.com

Definition Only

WO#: 1811115

Date: 11/21/2018

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 <5x 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:** 21-Nov-18**ELAP ID : 11418**

CLIENT: Envirotrac
Lab Order: 1811115
Project: Frost Street OU2; 101 Frost Street, Westbury, N
Lab ID: 1811115-001A

Client Sample ID: EX-1B
Collection Date: 11/16/2018 9:00:00 AM
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: LA
1,1,1-Trichloroethane	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
1,1,2,2-Tetrachloroethane	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
1,1,2-Trichloroethane	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
1,1-Dichloroethane	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
1,1-Dichloroethene	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
1,2-Dichlorobenzene	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
1,2-Dichloroethane	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
1,2-Dichloropropane	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
1,3-Dichlorobenzene	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
1,4-Dichlorobenzene	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
2-Chloroethyl vinyl ether	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Benzene	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Bromodichloromethane	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Bromoform	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Bromomethane	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Carbon tetrachloride	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Chlorobenzene	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Chloroethane	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Chloroform	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Chloromethane	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
cis-1,3-Dichloropropene	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Dibromochloromethane	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Ethylbenzene	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Methylene chloride	ND	5.0	5.0	U	µg/L	1	11/21/2018 12:15:00 AM
Tetrachloroethene	180	2.5	20	D	µg/L	10	11/21/2018 12:45:00 AM
Toluene	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
trans-1,2-Dichloroethene	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
trans-1,3-Dichloropropene	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Trichloroethene	5.0	0.25	2.0		µg/L	1	11/21/2018 12:15:00 AM
Trichlorofluoromethane	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Vinyl chloride	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
Xylenes, Total	ND	0.60	6.0	U	µg/L	1	11/21/2018 12:15:00 AM
Acetone	ND	5.0	5.0	U	µg/L	1	11/21/2018 12:15:00 AM

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

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Original

American Analytical Laboratories, LLC.**Date: 21-Nov-18****ELAP ID : 11418****CLIENT:** Envirotrac**Client Sample ID:** EX-1B**Lab Order:** 1811115**Collection Date:** 11/16/2018 9:00:00 AM**Project:** Frost Street OU2; 101 Frost Street, Westbury, N**Matrix:** LIQUID**Lab ID:** 1811115-001A**Certificate of Results**

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE EPA METHOD 624.1							
					E624.1	E624.1	Analyst: LA
m,p-Xylene	ND	0.40	4.0	U	µg/L	1	11/21/2018 12:15:00 AM
Methyl tert-butyl ether	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM
o-Xylene	ND	0.25	2.0	U	µg/L	1	11/21/2018 12:15:00 AM

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Original

American Analytical Laboratories, LLC.**Date:** 21-Nov-18**ELAP ID : 11418**

CLIENT: Envirotrac
Lab Order: 1811115
Project: Frost Street OU2; 101 Frost Street, Westbury, N
Lab ID: 1811115-002A

Client Sample ID: EX-1C
Collection Date: 11/16/2018 9:00:00 AM
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: LA
1,1,1-Trichloroethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
1,1,2,2-Tetrachloroethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
1,1,2-Trichloroethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
1,1-Dichloroethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
1,1-Dichloroethene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
1,2-Dichlorobenzene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
1,2-Dichloroethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
1,2-Dichloropropane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
1,3-Dichlorobenzene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
1,4-Dichlorobenzene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
2-Chloroethyl vinyl ether	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Benzene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Bromodichloromethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Bromoform	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Bromomethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Carbon tetrachloride	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Chlorobenzene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Chloroethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Chloroform	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Chloromethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
cis-1,3-Dichloropropene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Dibromochloromethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Ethylbenzene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Methylene chloride	ND	5.0	5.0	U	µg/L	1	11/20/2018 11:15:00 PM
Tetrachloroethene	43	0.25	2.0		µg/L	1	11/20/2018 11:15:00 PM
Toluene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
trans-1,2-Dichloroethene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
trans-1,3-Dichloropropene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Trichloroethene	2.1	0.25	2.0		µg/L	1	11/20/2018 11:15:00 PM
Trichlorofluoromethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Vinyl chloride	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
Xylenes, Total	ND	0.60	6.0	U	µg/L	1	11/20/2018 11:15:00 PM
Acetone	ND	5.0	5.0	U	µg/L	1	11/20/2018 11:15:00 PM

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

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Original

American Analytical Laboratories, LLC.**Date:** 21-Nov-18**ELAP ID : 11418****CLIENT:** Envirotrac**Client Sample ID:** EX-1C**Lab Order:** 1811115**Collection Date:** 11/16/2018 9:00:00 AM**Project:** Frost Street OU2; 101 Frost Street, Westbury, N**Matrix:** LIQUID**Lab ID:** 1811115-002A**Certificate of Results**

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE EPA METHOD 624.1							
					E624.1	E624.1	Analyst: LA
m,p-Xylene	ND	0.40	4.0	U	µg/L	1	11/20/2018 11:15:00 PM
Methyl tert-butyl ether	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM
o-Xylene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:15:00 PM

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

Tel - (631) 454-6100 Fax - (631) 454-8027 www.american-analytical.com

Original

American Analytical Laboratories, LLC.**Date:** 21-Nov-18**ELAP ID : 11418**

CLIENT: Envirotrac
Lab Order: 1811115
Project: Frost Street OU2; 101 Frost Street, Westbury, N
Lab ID: 1811115-003A

Client Sample ID: EX-1D
Collection Date: 11/16/2018 9:00:00 AM
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: LA
1,1,1-Trichloroethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
1,1,2,2-Tetrachloroethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
1,1,2-Trichloroethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
1,1-Dichloroethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
1,1-Dichloroethene	0.97	0.25	2.0	J	µg/L	1	11/20/2018 11:45:00 PM
1,2-Dichlorobenzene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
1,2-Dichloroethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
1,2-Dichloropropane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
1,3-Dichlorobenzene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
1,4-Dichlorobenzene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
2-Chloroethyl vinyl ether	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
Benzene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
Bromodichloromethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
Bromoform	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
Bromomethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
Carbon tetrachloride	0.37	0.25	2.0	J	µg/L	1	11/20/2018 11:45:00 PM
Chlorobenzene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
Chloroethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
Chloroform	0.46	0.25	2.0	J	µg/L	1	11/20/2018 11:45:00 PM
Chloromethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
cis-1,3-Dichloropropene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
Dibromochloromethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
Ethylbenzene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
Methylene chloride	ND	5.0	5.0	U	µg/L	1	11/20/2018 11:45:00 PM
Tetrachloroethene	16	0.25	2.0		µg/L	1	11/20/2018 11:45:00 PM
Toluene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
trans-1,2-Dichloroethene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
trans-1,3-Dichloropropene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
Trichloroethene	8.7	0.25	2.0		µg/L	1	11/20/2018 11:45:00 PM
Trichlorofluoromethane	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
Vinyl chloride	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
Xylenes, Total	ND	0.60	6.0	U	µg/L	1	11/20/2018 11:45:00 PM
Acetone	ND	5.0	5.0	U	µg/L	1	11/20/2018 11:45:00 PM

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American Analytical Laboratories, LLC.**Date:** 21-Nov-18**ELAP ID : 11418**

CLIENT:	Envirotrac	Client Sample ID:	EX-1D
Lab Order:	1811115	Collection Date:	11/16/2018 9:00:00 AM
Project:	Frost Street OU2; 101 Frost Street, Westbury, N	Matrix:	LIQUID
Lab ID:	1811115-003A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE EPA METHOD 624.1							
				E624.1		E624.1	
m,p-Xylene	ND	0.40	4.0	U	µg/L	1	11/20/2018 11:45:00 PM
Methyl tert-butyl ether	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM
o-Xylene	ND	0.25	2.0	U	µg/L	1	11/20/2018 11:45:00 PM

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