ENSAFE
creative thinking. custom solutions. ®

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/m^3]) 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/m³)[2]**	**January 2020 Effluent Concentration (µg/m³)**
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	*Via email to amtamuno@gw.dec.state.ny.us*
	C. Bethoney, NYSDOH	*Via email to charlotte.bethoney@health.ny.gov*
	J. Nealon, NYSDOH	*Via email to jacquelyn.nealon@health.ny.gov*
	R. Putnam, NCDOH	*Via email to rputnam@nassaucountyny.gov*
	J. Vasquez, U.S. EPA	*Via email to vazquez.julio@epa.gov*
	T. Pupilla, Sanders Equities	*Via email to tpupilla@sandersequities.com*
	K. Maldonado, Esq.	*Via email to kevinmaldonado64@yahoo.com*
	J. Privitera, Esq.	*Via email to privitera@mltw.com*
	P. Coop, EnSafe	*Via email to pcoop@ensafe.com*
	J. Wilkinson, Envirotrac	*Via email to jamesw@envirotrac.com*

Appendix A
AS/SVE System Operation and Maintenance 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: 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:

Colleceted 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: 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
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: 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		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
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-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

PHOENIX
Environmental Laboratories, Inc.

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,

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

NY # 11301

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

January 24, 2020

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

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	JW	01/16/20	14:54
Location Code:	ENVIROTR	Received by:	CP	01/20/20	13:46
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	819				

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
1,1,1-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	1
4-Ethyltoluene	ND	*0.204*	ND	*1.00*	01/23/20	AW	1	1
4-Isopropyltoluene	ND	*0.182*	ND	*1.00*	01/23/20	AW	1	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	

Project ID: ENSAFE WESTBURY
Client ID: SVE EFFLUENT

Phoenix I.D.: CF16065

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	
QA/QC Surrogates/Internals								
% 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	

Ver 1

Project ID: ENSAFE WESTBURY
Client ID: SVE EFFLUENT

Phoenix I.D.: CF16065

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution

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 (preceeded 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

PHOENIX

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

January 24, 2020

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

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	JW	01/16/20	14:57
Location Code:	ENVIROTR	Received by:	CP	01/20/20	13:46
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	779				

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	
Volatiles (TO15)								
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	

Project ID: ENSAFE WESTBURY
Client ID: SVE INFLUENT

Phoenix I.D.: CF16066

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	
QA/QC Surrogates/Internals								
% 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	

Ver 1

Project ID: ENSAFE WESTBURY
Client ID: SVE INFLUENT

Phoenix I.D.: CF16066

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution

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 (preceeded 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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Canister Sampling Information

January 24, 2020

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

Location Code: ENVIROTR

SDG I.D.: GCF16065

Project ID: ENSAFE WESTBURY

						Laboratory					Field			
Client Id	Lab Id	Canister Id	Canister Type	Reg. Id	Chk Out Date	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	\B SAM	Grab				01/16/20 2:53	01/16/20 2:54
SVE INFLUENT	CF16066	779	1.4L		01/13/20	-30	-4	\B SAM	Grab				01/16/20 2:56	01/16/20 2:57

PHOENIX

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

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 - 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 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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

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.

CHAIN OF CUSTODY RECORD
AIR ANALYSES

PHOENIX Environmental Laboratories, Inc.
587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823
800-827-5426
email: greg@phoenixlabs.com

P.O. # | Page 1 of 1

Data Delivery:
☐ Fax #:
☑ Email: jamesw@envirotrac.com
☐ Phone #:

Report to: James Wilkinson	Project Name: EnSafe-Westbury	Data Format: (Circle) Equis Excel Other pdf
Customer: EnviroTrac	Invoice to: EnviroTrac	Requested Deliverable: RCP ASP CAT B
Address: 5 Old Pork Rd		MCP NJ Deliverables
Yaphank, NY 11980	Sampled by: JIM WILKINSON	Quote Number:

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab (G) Composite (C)	TO-15	APH
		THIS SECTION FOR LAB USE ONLY											MATRIX			ANALYSES	
1600105	SVE Effluent	819	1.4	-30		NA	NA	2:53	2:54	1/16						✓	
1600106	SVE Influent	779	1.4	-30		NA	NA	2:56	2:57	1/16						✓	

Relinquished by:	Accepted by:	Date:	Time:
		1-20-20	9:30
		1-20-20	13:46

I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:

Signature: _____ Date: _____

State Where Samples Collected: NY

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:
(8)(1.4)
GRAB

Turnaround Time:
- ☐ 1 Day
- ☐ 2 Day
- ☐ 3 Day
- ☐ 4 Day
- ☐ 5 Day

Requested Criteria: (Please Circle)

CT:	MA:	NJ:	NY:	PA:	VT:
TAC I/C TAC RES SVVC I/C SVVC RES GWV I/C GWV CES	**Indoor Air:** Residential Ind/Commercial **Soil Gas:** Residential Ind/Commercial	**Indoor Air:** Residential Ind/Commercial **Soil Gas:** Residential Ind/Commercial	Vapor Intrusion	**Indoor Air** Residential Non-residential	**Indoor Air** Residential Industrial **Sub-slab** Residential Industrial

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

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

CHAIN OF CUSTODY

AMERICAN ANALYTICAL LABORATORIES
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

Client Information			Project Information			Analytical Information
Company Name EnviroTrac Ltd			**Project Name** Frost Street			
Address 5 Old Dock Rd			**Street** 101 Frost Street			
City Yaphank	**State** NY	**Zip** 11980	**City** Westbury	**State** NY	**Zip**	
Project Contact Jim Wilkinson			**Project #**			
Phone # 631 924-3001			**Sampler's Name / Company** Jim Wilkinson			
E-mail jamesw@envirotrac.com			**Sampler's Signature**			

LAB SAMPLE # (LAB USE ONLY)	Sample Information: Client Sample ID	Sample Type	Matrix Code	Sample Collection: Date	Time	Glass / Plastic	Sample Containers: Total # of bottles	Number of Each Preserved Bottle: NONE	HCl	NaOH	HNO_3	H_2SO_4	$NaHSO_4$	MeOH	OTHER	VOCs EPA 624
2001100-001	**Discharge Water**	G	L	1/16/2020	2:25	G	3		x							X

Turnaround Time (Business Days)

Standard
- ■ 7-10 Business Days
- ☐ 5 Day *RUSH*
- ☐ 4 Day *RUSH*
- ☐ 3 Day *RUSH*
- ☐ 2 Day *RUSH*
- ☐ 1 Day *RUSH*

SAMPLE TYPE

G = Grab
C = Composite
B = Blank

MATRIX CODES

L = Liquid PC = Paint Chip
S = Soil SL = Sludge
O = Oil SD = Solid
W = Wipe M = Miscellaneous

Comments / Remarks

Cooler Temp: 1.9 °C

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

RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY LAB (SIGNATURE)	DATE / TIME	PRINTED NAME
Jim Wilkinson	1/17/20 19:17	Jim Wilkinson	P Mas	1/17/20 10:17	P Mas
RELINQUISHED BY (SIGNATURE)	DATE / TIME	PRINTED NAME	RECEIVED BY LAB (SIGNATURE)	DATE / TIME	PRINTED NAME

American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
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	Lori Beyer
Completed By:	Lori Beyer	1/17/2020 10:29:10 AM	Lori Beyer
Reviewed By:	Phyllis Masi	1/17/2020	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? (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:	Jim Wilkinson	Date:	4/26/2019
By Whom:	Lori Bever	Via:	☑ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:	EX-1D 625?		
Client Instructions:	no, 624 required.		

18. Additional remarks:

Cooler Information

Cooler No	Temp ºC	Condition	Seal Intact	Seal No	Seal Date	Signed By

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.

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#: **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 <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

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.

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