ENSAFE
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1233 Silas Deane Highway | Wethersfield, Connecticut 06109 | Telephone 860-665-1140 | Fax 860-665-9445 | www.ensafe.com

Via email to Jeffrey.dyber@dec.ny.gov

February 9, 2018

Mr. Jeffrey Dyber, P.E.
NYSDEC, Remedial Bureau A
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7015

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

Dear Mr. Dyber:

EnSafe Inc. is pleased to submit this revised Progress Report for the Frost Street Sites (Site ID #s 1-30043 I, L, M) for work completed in January 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 air compressor was repaired on January 12, 2018.
    - The SVE transfer pump failed this month, causing high levels in the moisture separator which led to system downtime. The SVE transfer pump is scheduled to be replaced along with the semiannual compressor service, on February 9, 2018.
- Quantitative sampling of the SVE system granular activated carbon influent and effluent air flow was conducted on February 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**.
    - Influent concentrations of Frost Street-related contaminants of concern (tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, and vinyl chloride) continue to indicate significant mass extraction.
    - Due to effluent concentrations exhibiting breakthrough (December/November PID readings and November analytical data), a carbon exchange was performed on January 8, 2018.

Frost Street Sites Effluent Compliance			
System Flow Rate =		800	ft^3/m
Compound	**Annual Mass Emission Limit (lbs/year)**	**Allowable Continuous Annual Concentration (µg/m³)**	**January 2018 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	100	3,800	ND

Notes:

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

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

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.

- On January 17, 2018, approximately 500 gallons of system condensate water was discharged from the holding tank to the sewer via the onsite connection. All water is treated via activate carbon adsorption prior to discharge. Groundwater concentrations did not exceed applicable permit limits, as shown in **Appendix C.** An additional discharge of 250 gallons occurred on January 24, 2018.

Groundwater Extraction/Hydraulic Containment System Installation (OU2)

- Removal of sediment from the extraction wells and select monitoring wells was performed the week of January 2, 2018 and the pumps were installed in the shallow wells on January 12, 2018, as described in the attached daily reports (**Appendix D**). .
- The Frost Street Parties are awaiting NYSDEC response to a letter submitted on February 5, 2018, regarding the scope of the pumping test. Once resolution is reached on the scope of the revised pumping test, system startup and the pumping test can begin in three weeks. A schedule showing this and the subsequent activities is included as **Appendix E**; the schedule assumes resolution will be reached on March 1, 2018 and presents the duration of the proposed modified pumping test.

Quarterly/Annual Groundwater Monitoring

- The fourth quarter 2017 groundwater sampling event was completed the week of December 18, 2017, results will be submitted in a forthcoming report, when available.

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

ENSAFE

Sincerely,

EnSafe, Inc., by

Alexandra Stark, P.E.

Copies:

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J. Wilkinson, Envirotrac	*Via email to jamesw@envirotrac.com*

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: 5-Jan
Weather / Temp: Clear / 16 DEG
Technician / Operator: DW

Arrival Time: 12:00
Departure Time: 13:00

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)	OFF	OFF			

Soil Vapor Extraction System

Blower Air Velocity/Flow Rate (fpm)/(cfm)	3200	628	Blower 1 Total Runtime (hrs)	49,208.8
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	49,039.5
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0
Moisture Separator Vacuum ("Hg)	3		Blower 2 Air Filter Differential Pressure ("H2O)	0
VGAC-1 Influent Vacuum ("H2O)	64		VGAC-1 Influent PID (ppm)	6.8
VGAC-1 Effluent Vacuum ("H2O)	56		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	54		VGAC-2 Influent PID (ppm)	0.2
VGAC-2 Effluent Vacuum ("H2O)	54		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Pressure ("H2O)	6		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Pressure ("H2O)	3		VGAC-3 Effluent PID (ppm)	0.0
VGAC-2 Influent Temp (DegF)	106		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	10			
Transfer Pump Total Runtime (hrs)	25,026.8		Condensate Storage Tank Level (gal)	250

SVE Manifold Legs - Vacuum/Flow Rate/PID

	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	40	6500	142		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	34	3300	72	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	42	3500	76		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	34	2600	57	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	36	3600	79		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	34	5500	120	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	36	4400	96		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	34	2400	52	

Air Sparge System

Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	Off for repairs
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	Off for repairs
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	25,116
Manifold Regulator Pressure (psi)			

AS Manifold Legs - Pressure/Flow Rate

	Pressure	Flow Rate		Pressure	Flow Rate
AS-1 (psi)/(cfm)			AS-11 (psi)/(cfm)		
AS-2 (psi)/(cfm)			AS-12B (psi)/(cfm)		
AS-3 (psi)/(cfm)			AS-13B (psi)/(cfm)		
AS-4 (psi)/(cfm)			AS-14 (psi)/(cfm)		
AS-5 (psi)/(cfm)			AS-15 (psi)/(cfm)		
AS-6 (psi)/(cfm)			AS-16B (psi)/(cfm)		
AS-7 (psi)/(cfm)			AS-17 (psi)/(cfm)		
AS-8 (psi)/(cfm)			AS-18 (psi)/(cfm)		
AS-9 (psi)/(cfm)			AS-19 (psi)/(cfm)		
AS-10B (psi)/(cfm)					

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: 8-Jan
Weather / Temp: Clear / 18 DEG
Technician / Operator: DW

Arrival Time: 7:00
Departure Time: 13:30

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)	OFF	OFF			

Soil Vapor Extraction System

Blower Air Velocity/Flow Rate (fpm)/(cfm)	4500	884	Blower 1 Total Runtime (hrs)	49,245.0
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	49,075.5
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)	0
VGAC-1 Influent Vacuum ("H2O)	74		VGAC-1 Influent PID (ppm)	0.0
VGAC-1 Effluent Vacuum ("H2O)	78		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	74		VGAC-2 Influent PID (ppm)	0.0
VGAC-2 Effluent Vacuum ("H2O)	84		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Pressure ("H2O)	6		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Pressure ("H2O)	3		VGAC-3 Effluent PID (ppm)	0.0
VGAC-2 Influent Temp (DegF)	110		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	17			
Transfer Pump Total Runtime (hrs)	25,027.0		Condensate Storage Tank Level (gal)	250

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)	44	2900	63	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	44	5000	109		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)	Off for repairs
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	Off for repairs
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	25,116
Manifold Regulator Pressure (psi)			

AS Manifold Legs - Pressure/Flow Rate

	Pressure	Flow Rate		Pressure	Flow Rate
AS-1 (psi)/(cfm)			AS-11 (psi)/(cfm)		
AS-2 (psi)/(cfm)			AS-12B (psi)/(cfm)		
AS-3 (psi)/(cfm)			AS-13B (psi)/(cfm)		
AS-4 (psi)/(cfm)			AS-14 (psi)/(cfm)		
AS-5 (psi)/(cfm)			AS-15 (psi)/(cfm)		
AS-6 (psi)/(cfm)			AS-16B (psi)/(cfm)		
AS-7 (psi)/(cfm)			AS-17 (psi)/(cfm)		
AS-8 (psi)/(cfm)			AS-18 (psi)/(cfm)		
AS-9 (psi)/(cfm)			AS-19 (psi)/(cfm)		
AS-10B (psi)/(cfm)					

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: 17-Jan
Weather / Temp: Snow / 30 DEG
Technician / Operator: MA, JL

Arrival Time: 12:40
Departure Time: 13:30

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)	49,354.0
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	49,181.0
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0
Moisture Separator Vacuum ("Hg)	3		Blower 2 Air Filter Differential Pressure ("H2O)	0
VGAC-1 Influent Vacuum ("H2O)	72		VGAC-1 Influent PID (ppm)	0.2
VGAC-1 Effluent Vacuum ("H2O)	70		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	84		VGAC-2 Influent PID (ppm)	0.2
VGAC-2 Effluent Vacuum ("H2O)	84		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Pressure ("H2O)	7.2		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Pressure ("H2O)	2.3		VGAC-3 Effluent PID (ppm)	0.0
VGAC-2 Influent Temp (DegF)	128		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	20			
Transfer Pump Total Runtime (hrs)	25,027.6		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)	48	7500	164		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	42	4000	87	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	50	4250	93		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	42	2900	63	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	42	5000	109		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	40	6000	131	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	42	4000	87		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	44	2800	61	

Air Sparge System

Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	25,120
Manifold Regulator Pressure (psi)			

AS Manifold Legs - Pressure/Flow Rate

	Pressure	Flow Rate		Pressure	Flow Rate
AS-1 (psi)/(cfm)	18.5	8	AS-11 (psi)/(cfm)	17.5	12
AS-2 (psi)/(cfm)	17	11	AS-12B (psi)/(cfm)	18	8
AS-3 (psi)/(cfm)	16.5	10	AS-13B (psi)/(cfm)	15.5	8
AS-4 (psi)/(cfm)	15	6	AS-14 (psi)/(cfm)	16.5	9
AS-5 (psi)/(cfm)	18	14	AS-15 (psi)/(cfm)	16.5	10
AS-6 (psi)/(cfm)	18	11	AS-16B (psi)/(cfm)	15.5	10
AS-7 (psi)/(cfm)	18	11	AS-17 (psi)/(cfm)	17	4.5
AS-8 (psi)/(cfm)	18	11	AS-18 (psi)/(cfm)	15	11
AS-9 (psi)/(cfm)	17.5	16	AS-19 (psi)/(cfm)	16.5	15
AS-10B (psi)/(cfm)	16	8			

Notes, Comments & Observations:

Collected water sample, drained tank.

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: 24-Jan
Weather / Temp: Clear / 45 DEG
Technician / Operator: JL

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)	OFF	ON			

Soil Vapor Extraction System

Blower Air Velocity/Flow Rate (fpm)/(cfm)	4200	825	Blower 1 Total Runtime (hrs)	49,438.8
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	49,262.0
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)	70		VGAC-1 Influent PID (ppm)	0.0
VGAC-1 Effluent Vacuum ("H2O)	72		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	70		VGAC-2 Influent PID (ppm)	0.0
VGAC-2 Effluent Vacuum ("H2O)	80		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Pressure ("H2O)	9.9		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Pressure ("H2O)	2.5		VGAC-3 Effluent PID (ppm)	0.0
VGAC-2 Influent Temp (DegF)	126		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	20			
Transfer Pump Total Runtime (hrs)	25,027.6		Condensate Storage Tank Level (gal)	250

SVE Manifold Legs - Vacuum/Flow Rate/PID

	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	46	7100	155		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	40	3800	83	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	48	4000	87		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	40	2700	59	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	40	4600	100		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	38	6000	131	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	40	4000	87		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	42	2600	57	

Air Sparge System

Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	25,123
Manifold Regulator Pressure (psi)			

AS Manifold Legs - Pressure/Flow Rate

	Pressure	Flow Rate		Pressure	Flow Rate
AS-1 (psi)/(cfm)	15	6	AS-11 (psi)/(cfm)	15	5
AS-2 (psi)/(cfm)	14	5	AS-12B (psi)/(cfm)	15	5
AS-3 (psi)/(cfm)	13	5	AS-13B (psi)/(cfm)	13	5
AS-4 (psi)/(cfm)	13	5	AS-14 (psi)/(cfm)	15	6
AS-5 (psi)/(cfm)	15	6	AS-15 (psi)/(cfm)	15	5
AS-6 (psi)/(cfm)	15	5	AS-16B (psi)/(cfm)	13.5	5
AS-7 (psi)/(cfm)	15	6	AS-17 (psi)/(cfm)	16	5
AS-8 (psi)/(cfm)	15	5	AS-18 (psi)/(cfm)	14	5
AS-9 (psi)/(cfm)	15	5	AS-19 (psi)/(cfm)	15.5	8
AS-10B (psi)/(cfm)	13.5	5			

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

Arrival Time: 14:00
Departure Time: 16:00

System Status

	Arrival	Departure		Arrival	Departure
SVE Blower 1 (ON/OFF)	OFF	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)	OFF	ON			

Soil Vapor Extraction System

Blower Air Velocity/Flow Rate (fpm)/(cfm)	4200	825	Blower 1 Total Runtime (hrs)	49,450.9
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	49,268.6
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)	74		VGAC-1 Influent PID (ppm)	0.0
VGAC-1 Effluent Vacuum ("H2O)	78		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	74		VGAC-2 Influent PID (ppm)	0.0
VGAC-2 Effluent Vacuum ("H2O)	84		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Pressure ("H2O)	6		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Pressure ("H2O)	3		VGAC-3 Effluent PID (ppm)	0.0
VGAC-2 Influent Temp (DegF)	100		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	15			
Transfer Pump Total Runtime (hrs)	25,029.2		Condensate Storage Tank Level (gal)	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	0.0	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	42	4000	87	0.0
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	52	4500	98	0.0	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	43	2900	63	0.0
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	44	5000	109	0.0	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	42	6500	142	0.0
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	42	4200	92	0.0	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	44	2900	63	0.0

Air Sparge System

Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	25,127
Manifold Regulator Pressure (psi)			

AS Manifold Legs - Pressure/Flow Rate

	Pressure	Flow Rate		Pressure	Flow Rate
AS-1 (psi)/(cfm)	18	6	AS-11 (psi)/(cfm)	16	8
AS-2 (psi)/(cfm)	16	4	AS-12B (psi)/(cfm)	16	5
AS-3 (psi)/(cfm)	16	8	AS-13B (psi)/(cfm)	15	8
AS-4 (psi)/(cfm)	15	4	AS-14 (psi)/(cfm)	15	8
AS-5 (psi)/(cfm)	17	10	AS-15 (psi)/(cfm)	15	8
AS-6 (psi)/(cfm)	17	7	AS-16B (psi)/(cfm)	15	7
AS-7 (psi)/(cfm)	17	7	AS-17 (psi)/(cfm)	16	4
AS-8 (psi)/(cfm)	17	8	AS-18 (psi)/(cfm)	15	7
AS-9 (psi)/(cfm)	17	12	AS-19 (psi)/(cfm)	15	9
AS-10B (psi)/(cfm)	15	6			

Notes, Comments & Observations:

System off upon arrival due to high level in moisture separator. Transfer pump not working properly.

Collected monthly air samples.

Appendix B

SVE System Influent/Effluent Sampling (TO-15)

Laboratory Analytical Results

Wednesday, February 07, 2018

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

Project ID: ENSAFE-WESTBURY
Sample ID#s: BZ84200 - BZ84201

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,

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

February 07, 2018

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

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	JW	02/01/18	15:59
Location Code:	ENVIROTR	Received by:	SW	02/02/18	16:39
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	722				

Laboratory Data

SDG ID: GBZ84200
Phoenix ID: BZ84200

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	*0.146*	ND	*1.00*	02/03/18	KCA	1	1
1,1,1-Trichloroethane	0.428	*0.183*	2.33	*1.00*	02/03/18	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	02/03/18	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	ND	*1.00*	02/03/18	KCA	1	
1,1-Dichloroethane	ND	*0.247*	ND	*1.00*	02/03/18	KCA	1	
1,1-Dichloroethene	ND	*0.051*	ND	*0.20*	02/03/18	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	ND	*1.00*	02/03/18	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	ND	*1.00*	02/03/18	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	ND	*1.00*	02/03/18	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	ND	*1.00*	02/03/18	KCA	1	
1,2-Dichloroethane	ND	*0.247*	ND	*1.00*	02/03/18	KCA	1	
1,2-dichloropropane	ND	*0.217*	ND	*1.00*	02/03/18	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	ND	*1.00*	02/03/18	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	ND	*1.00*	02/03/18	KCA	1	
1,3-Butadiene	ND	*0.452*	ND	*1.00*	02/03/18	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	ND	*1.00*	02/03/18	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	ND	*1.00*	02/03/18	KCA	1	
1,4-Dioxane	ND	*0.278*	ND	*1.00*	02/03/18	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	ND	*1.00*	02/03/18	KCA	1	1
4-Ethyltoluene	ND	*0.204*	ND	*1.00*	02/03/18	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	ND	*1.00*	02/03/18	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	ND	*1.00*	02/03/18	KCA	1	
Acetone	10.4	*0.421*	24.7	*1.00*	02/03/18	KCA	1	
Acrylonitrile	ND	*0.461*	ND	*1.00*	02/03/18	KCA	1	
Benzene	ND	*0.313*	ND	*1.00*	02/03/18	KCA	1	
Benzyl chloride	ND	*0.193*	ND	*1.00*	02/03/18	KCA	1	

Project ID: ENSAFE-WESTBURY
Client ID: SVE INFLUENT

Phoenix I.D.: BZ84200

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	ND	*1.00*	02/03/18	KCA	1	
Bromoform	ND	*0.097*	ND	*1.00*	02/03/18	KCA	1	
Bromomethane	ND	*0.258*	ND	*1.00*	02/03/18	KCA	1	
Carbon Disulfide	ND	*0.321*	ND	*1.00*	02/03/18	KCA	1	
Carbon Tetrachloride	0.084	*0.032*	0.53	*0.20*	02/03/18	KCA	1	
Chlorobenzene	ND	*0.217*	ND	*1.00*	02/03/18	KCA	1	
Chloroethane	ND	*0.379*	ND	*1.00*	02/03/18	KCA	1	
Chloroform	ND	*0.205*	ND	*1.00*	02/03/18	KCA	1	
Chloromethane	ND	*0.485*	ND	*1.00*	02/03/18	KCA	1	
Cis-1,2-Dichloroethene	74.9	*6.31*	297	*25.0*	02/05/18	KCA	125	
cis-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	02/03/18	KCA	1	
Cyclohexane	ND	*0.291*	ND	*1.00*	02/03/18	KCA	1	
Dibromochloromethane	ND	*0.118*	ND	*1.00*	02/03/18	KCA	1	
Dichlorodifluoromethane	ND	*0.202*	ND	*1.00*	02/03/18	KCA	1	
Ethanol	2.52	*0.531*	4.75	*1.00*	02/03/18	KCA	1	1
Ethyl acetate	ND	*0.278*	ND	*1.00*	02/03/18	KCA	1	1
Ethylbenzene	ND	*0.230*	ND	*1.00*	02/03/18	KCA	1	
Heptane	ND	*0.244*	ND	*1.00*	02/03/18	KCA	1	
Hexachlorobutadiene	ND	*0.094*	ND	*1.00*	02/03/18	KCA	1	
Hexane	ND	*0.284*	ND	*1.00*	02/03/18	KCA	1	
Isopropylalcohol	1.30	*0.407*	3.19	*1.00*	02/03/18	KCA	1	
Isopropylbenzene	ND	*0.204*	ND	*1.00*	02/03/18	KCA	1	
m,p-Xylene	ND	*0.230*	ND	*1.00*	02/03/18	KCA	1	
Methyl Ethyl Ketone	7.39	*0.339*	21.8	*1.00*	02/03/18	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	ND	*1.00*	02/03/18	KCA	1	
Methylene Chloride	ND	*0.864*	ND	*3.00*	02/03/18	KCA	1	
n-Butylbenzene	ND	*0.182*	ND	*1.00*	02/03/18	KCA	1	1
o-Xylene	ND	*0.230*	ND	*1.00*	02/03/18	KCA	1	
Propylene	0.949	*0.581*	1.63	*1.00*	02/03/18	KCA	1	1
sec-Butylbenzene	ND	*0.182*	ND	*1.00*	02/03/18	KCA	1	1
Styrene	ND	*0.235*	ND	*1.00*	02/03/18	KCA	1	
Tetrachloroethene	2190	*4.61*	14800	*31.2*	02/05/18	KCA	125	
Tetrahydrofuran	4.94	*0.339*	14.6	*1.00*	02/03/18	KCA	1	1
Toluene	0.269	*0.266*	1.01	*1.00*	02/03/18	KCA	1	
Trans-1,2-Dichloroethene	2.04	*0.252*	8.08	*1.00*	02/03/18	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	02/03/18	KCA	1	
Trichloroethene	338	*4.66*	1820	*25.0*	02/05/18	KCA	125	
Trichlorofluoromethane	0.300	*0.178*	1.68	*1.00*	02/03/18	KCA	1	
Trichlorotrifluoroethane	ND	*0.131*	ND	*1.00*	02/03/18	KCA	1	
Vinyl Chloride	ND	*0.078*	ND	*0.20*	02/03/18	KCA	1	
QA/QC Surrogates								
% Bromofluorobenzene	105	*%*	105	*%*	02/03/18	KCA	1	

Ver 1

Project ID: ENSAFE-WESTBURY
Client ID: SVE INFLUENT

Phoenix I.D.: BZ84200

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

1 = This parameter is not certified by 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 (preceeded 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, Laboratory Director
February 07, 2018
Reviewed and Released by: Ethan Lee, Project Manager

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

February 07, 2018

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

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	JW	02/01/18	15:56
Location Code:	ENVIROTR	Received by:	SW	02/02/18	16:39
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	835				

Laboratory Data

SDG ID: GBZ84200
Phoenix ID: BZ84201

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*	02/05/18	KCA	1	1
1,1,1-Trichloroethane	ND		*0.183*	ND	*1.00*	02/05/18	KCA	1	
1,1,2,2-Tetrachloroethane	ND		*0.146*	ND	*1.00*	02/05/18	KCA	1	
1,1,2-Trichloroethane	ND		*0.183*	ND	*1.00*	02/05/18	KCA	1	
1,1-Dichloroethane	ND		*0.247*	ND	*1.00*	02/05/18	KCA	1	
1,1-Dichloroethene	ND		*0.051*	ND	*0.20*	02/05/18	KCA	1	
1,2,4-Trichlorobenzene	ND		*0.135*	ND	*1.00*	02/05/18	KCA	1	
1,2,4-Trimethylbenzene	ND		*0.204*	ND	*1.00*	02/05/18	KCA	1	
1,2-Dibromoethane(EDB)	ND		*0.130*	ND	*1.00*	02/05/18	KCA	1	
1,2-Dichlorobenzene	ND		*0.166*	ND	*1.00*	02/05/18	KCA	1	
1,2-Dichloroethane	ND		*0.247*	ND	*1.00*	02/05/18	KCA	1	
1,2-dichloropropane	ND		*0.217*	ND	*1.00*	02/05/18	KCA	1	
1,2-Dichlorotetrafluoroethane	ND		*0.143*	ND	*1.00*	02/05/18	KCA	1	
1,3,5-Trimethylbenzene	ND		*0.204*	ND	*1.00*	02/05/18	KCA	1	
1,3-Butadiene	ND		*0.452*	ND	*1.00*	02/05/18	KCA	1	
1,3-Dichlorobenzene	ND		*0.166*	ND	*1.00*	02/05/18	KCA	1	
1,4-Dichlorobenzene	ND		*0.166*	ND	*1.00*	02/05/18	KCA	1	
1,4-Dioxane	ND		*0.278*	ND	*1.00*	02/05/18	KCA	1	
2-Hexanone(MBK)	ND		*0.244*	ND	*1.00*	02/05/18	KCA	1	1
4-Ethyltoluene	ND		*0.204*	ND	*1.00*	02/05/18	KCA	1	1
4-Isopropyltoluene	ND		*0.182*	ND	*1.00*	02/05/18	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND		*0.244*	ND	*1.00*	02/05/18	KCA	1	
Acetone	2.00	S	*0.421*	4.75	*1.00*	02/05/18	KCA	1	
Acrylonitrile	ND		*0.461*	ND	*1.00*	02/05/18	KCA	1	
Benzene	ND		*0.313*	ND	*1.00*	02/05/18	KCA	1	
Benzyl chloride	ND		*0.193*	ND	*1.00*	02/05/18	KCA	1	

Project ID: ENSAFE-WESTBURY
Client ID: SVE EFFLUENT

Phoenix I.D.: BZ84201

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	ND	*1.00*	02/05/18	KCA	1	
Bromoform	ND	*0.097*	ND	*1.00*	02/05/18	KCA	1	
Bromomethane	ND	*0.258*	ND	*1.00*	02/05/18	KCA	1	
Carbon Disulfide	ND	*0.321*	ND	*1.00*	02/05/18	KCA	1	
Carbon Tetrachloride	ND	*0.032*	ND	*0.20*	02/05/18	KCA	1	
Chlorobenzene	ND	*0.217*	ND	*1.00*	02/05/18	KCA	1	
Chloroethane	ND	*0.379*	ND	*1.00*	02/05/18	KCA	1	
Chloroform	ND	*0.205*	ND	*1.00*	02/05/18	KCA	1	
Chloromethane	ND	*0.485*	ND	*1.00*	02/05/18	KCA	1	
Cis-1,2-Dichloroethene	ND	*0.051*	ND	*0.20*	02/05/18	KCA	1	
cis-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	02/05/18	KCA	1	
Cyclohexane	ND	*0.291*	ND	*1.00*	02/05/18	KCA	1	
Dibromochloromethane	ND	*0.118*	ND	*1.00*	02/05/18	KCA	1	
Dichlorodifluoromethane	ND	*0.202*	ND	*1.00*	02/05/18	KCA	1	
Ethanol	0.802	*0.531*	1.51	*1.00*	02/05/18	KCA	1	1
Ethyl acetate	ND	*0.278*	ND	*1.00*	02/05/18	KCA	1	1
Ethylbenzene	ND	*0.230*	ND	*1.00*	02/05/18	KCA	1	
Heptane	ND	*0.244*	ND	*1.00*	02/05/18	KCA	1	
Hexachlorobutadiene	ND	*0.094*	ND	*1.00*	02/05/18	KCA	1	
Hexane	ND	*0.284*	ND	*1.00*	02/05/18	KCA	1	
Isopropylalcohol	1.25	*0.407*	3.07	*1.00*	02/05/18	KCA	1	
Isopropylbenzene	ND	*0.204*	ND	*1.00*	02/05/18	KCA	1	
m,p-Xylene	ND	*0.230*	ND	*1.00*	02/05/18	KCA	1	
Methyl Ethyl Ketone	ND	*0.339*	ND	*1.00*	02/05/18	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	ND	*1.00*	02/05/18	KCA	1	
Methylene Chloride	ND	*0.864*	ND	*3.00*	02/05/18	KCA	1	
n-Butylbenzene	ND	*0.182*	ND	*1.00*	02/05/18	KCA	1	1
o-Xylene	ND	*0.230*	ND	*1.00*	02/05/18	KCA	1	
Propylene	0.867	*0.581*	1.49	*1.00*	02/05/18	KCA	1	1
sec-Butylbenzene	ND	*0.182*	ND	*1.00*	02/05/18	KCA	1	1
Styrene	ND	*0.235*	ND	*1.00*	02/05/18	KCA	1	
Tetrachloroethene	ND	*0.037*	ND	*0.25*	02/05/18	KCA	1	
Tetrahydrofuran	ND	*0.339*	ND	*1.00*	02/05/18	KCA	1	1
Toluene	ND	*0.266*	ND	*1.00*	02/05/18	KCA	1	
Trans-1,2-Dichloroethene	ND	*0.252*	ND	*1.00*	02/05/18	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	02/05/18	KCA	1	
Trichloroethene	ND	*0.037*	ND	*0.20*	02/05/18	KCA	1	
Trichlorofluoromethane	ND	*0.178*	ND	*1.00*	02/05/18	KCA	1	
Trichlorotrifluoroethane	ND	*0.131*	ND	*1.00*	02/05/18	KCA	1	
Vinyl Chloride	ND	*0.078*	ND	*0.20*	02/05/18	KCA	1	
QA/QC Surrogates								
% Bromofluorobenzene	100	*%*	100	*%*	02/05/18	KCA	1	

Ver 1

Project ID: ENSAFE-WESTBURY
Client ID: SVE EFFLUENT

Phoenix I.D.: BZ84201

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

1 = This parameter is not certified by 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 (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

S - Laboratory solvent, contamination is possible.

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

February 07, 2018

Reviewed and Released by: Ethan Lee, Project Manager

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

February 07, 2018

QA/QC Data

SDG I.D.: GBZ84200

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 418872 (ppbv), QC Sample No: BZ83844 (BZ84200 (125X) , BZ84201)												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.500	ND	3.43	96	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.500	ND	2.73	107	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.500	ND	3.43	99	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.500	ND	2.73	111	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.500	ND	2.02	103	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.500	ND	1.98	92	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.500	ND	3.71	92	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.500	ND	2.46	114	3.37	4.19	0.686	0.852	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.500	ND	3.84	112	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.500	ND	3.00	106	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.500	ND	2.02	107	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.500	ND	2.31	110	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.500	ND	3.49	104	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.500	ND	2.46	115	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.500	ND	1.11	100	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.500	ND	3.00	103	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.500	ND	3.00	104	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.500	ND	1.80	119	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.500	ND	2.05	113	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.500	ND	2.46	114	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.500	ND	2.74	110	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.500	ND	2.05	127	7.78	9.9	1.90	2.43	NC	70 - 130	25
Acetone	ND	0.500	ND	1.19	97	145	172	61.0	72.3	17.0	70 - 130	25
Acrylonitrile	ND	0.500	ND	1.08	66	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.500	ND	1.60	115	2.19	2.65	0.686	0.830	NC	70 - 130	25
Benzyl chloride	ND	0.500	ND	2.59	111	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.500	ND	3.35	105	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.500	ND	5.17	101	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.500	ND	1.94	100	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.500	ND	1.56	112	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.500	ND	3.14	108	ND	ND	ND	ND	NC	70 - 130	25
Chlorobenzene	ND	0.500	ND	2.30	99	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.500	ND	1.32	96	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.500	ND	2.44	104	ND	ND	ND	ND	NC	70 - 130	25
Chloromethane	ND	0.500	ND	1.03	99	ND	ND	ND	ND	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.500	ND	1.98	114	8.99	10.5	2.27	2.65	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.500	ND	2.27	117	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.500	ND	1.72	118	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.500	ND	4.26	105	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.500	ND	2.47	105	2.56	3.04	0.519	0.615	NC	70 - 130	25
Ethanol	ND	0.500	ND	0.94	99	288	345	153	183	17.9	70 - 130	25

QA/QC Data

SDG I.D.: GBZ84200

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	0.500	ND	1.80	122	ND	ND	ND	ND	NC	70 - 130	25
Ethylbenzene	ND	0.500	ND	2.17	118	27.1	33.8	6.24	7.78	22.0	70 - 130	25
Heptane	ND	0.500	ND	2.05	115	ND	ND	ND	ND	NC	70 - 130	25
Hexachlorobutadiene	ND	0.500	ND	5.33	90	ND	ND	ND	ND	NC	70 - 130	25
Hexane	ND	0.500	ND	1.76	126	ND	ND	ND	ND	NC	70 - 130	25
Isopropylalcohol	ND	0.500	ND	1.23	91	74.2	86.2	30.2	35.1	15.0	70 - 130	25
Isopropylbenzene	ND	0.500	ND	2.46	104	ND	ND	ND	ND	NC	70 - 130	25
m,p-Xylene	ND	1.00	ND	4.34	121	97.6	125	22.5	28.8	24.6	70 - 130	25
Methyl Ethyl Ketone	ND	0.500	ND	1.47	105	10.7	12.7	3.63	4.32	17.4	70 - 130	25
Methyl tert-butyl ether(MTBE)	ND	0.500	ND	1.80	121	ND	ND	ND	ND	NC	70 - 130	25
Methylene Chloride	ND	0.500	ND	1.74	86	ND	ND	ND	ND	NC	70 - 130	25
n-Butylbenzene	ND	0.500	ND	2.74	114	ND	ND	ND	ND	NC	70 - 130	25
o-Xylene	ND	0.500	ND	2.17	114	22.3	28.3	5.15	6.53	23.6	70 - 130	25
Propylene	ND	0.500	ND	0.86	103	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	117	ND	ND	ND	ND	NC	70 - 130	25
Tetrachloroethene	ND	0.500	ND	3.39	103	78.6	99.0	11.6	14.6	22.9	70 - 130	25
Tetrahydrofuran	ND	0.500	ND	1.47	117	ND	ND	ND	ND	NC	70 - 130	25
Toluene	ND	0.500	ND	1.88	119	3.37	4.18	0.896	1.11	NC	70 - 130	25
Trans-1,2-Dichloroethene	ND	0.500	ND	1.98	111	7.29	8.64	1.84	2.18	NC	70 - 130	25
trans-1,3-Dichloropropene	ND	0.500	ND	2.27	119	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.500	ND	2.69	110	29.2	36.9	5.43	6.87	23.4	70 - 130	25
Trichlorofluoromethane	ND	0.500	ND	2.81	109	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	0.500	ND	1.28	102	ND	ND	ND	ND	NC	70 - 130	25
% Bromofluorobenzene	100		100		96	109	111	109	111	NC	70 - 130	25
QA/QC Batch 418746 (ppbv), QC Sample No: BZ83847 (BZ84200)												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	2.50	ND	17.2	113	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	2.50	ND	13.6	106	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	2.50	ND	17.2	114	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	2.50	ND	13.6	111	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	2.50	ND	10.1	105	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	2.50	ND	9.9	98	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	2.50	ND	18.5	92	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	2.50	ND	12.3	107	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	2.50	ND	19.2	112	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	2.50	ND	15.0	111	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	2.50	ND	10.1	104	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	2.50	ND	11.5	110	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	2.50	ND	17.5	115	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	2.50	ND	12.3	111	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	2.50	ND	5.53	101	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	2.50	ND	15.0	113	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	2.50	ND	15.0	114	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	2.50	ND	9.00	122	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	2.50	ND	10.2	104	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	2.50	ND	12.3	110	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	2.50	ND	13.7	101	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	2.50	ND	10.2	103	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	2.50	ND	5.93	111	1220	1230	516	519	0.6	70 - 130	25
Acrylonitrile	ND	2.50	ND	5.42	101	ND	ND	ND	ND	NC	70 - 130	25

QA/QC Data

SDG I.D.: GBZ84200

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	
Benzene	ND	2.50	ND	7.98	108	ND	ND	ND	ND	NC	70 - 130	25	
Benzyl chloride	ND	2.50	ND	12.9	102	ND	ND	ND	ND	NC	70 - 130	25	
Bromodichloromethane	ND	2.50	ND	16.7	107	ND	ND	ND	ND	NC	70 - 130	25	
Bromoform	ND	2.50	ND	25.8	133	ND	ND	ND	ND	NC	70 - 130	25	I
Bromomethane	ND	2.50	ND	9.7	108	ND	ND	ND	ND	NC	70 - 130	25	
Carbon Disulfide	ND	2.50	ND	7.78	118	ND	ND	ND	ND	NC	70 - 130	25	
Carbon Tetrachloride	ND	2.50	ND	15.7	112	ND	ND	ND	ND	NC	70 - 130	25	
Chlorobenzene	ND	2.50	ND	11.5	118	ND	ND	ND	ND	NC	70 - 130	25	
Chloroethane	ND	2.50	ND	6.59	100	ND	ND	ND	ND	NC	70 - 130	25	
Chloroform	ND	2.50	ND	12.2	108	ND	ND	ND	ND	NC	70 - 130	25	
Chloromethane	ND	2.50	ND	5.16	109	ND	ND	ND	ND	NC	70 - 130	25	
cis-1,3-Dichloropropene	ND	2.50	ND	11.3	107	ND	ND	ND	ND	NC	70 - 130	25	
Cyclohexane	ND	2.50	ND	8.60	100	ND	ND	ND	ND	NC	70 - 130	25	
Dibromochloromethane	ND	2.50	ND	21.3	117	ND	ND	ND	ND	NC	70 - 130	25	
Dichlorodifluoromethane	ND	2.50	ND	12.4	115	ND	ND	ND	ND	NC	70 - 130	25	
Ethanol	ND	2.50	ND	4.71	116	130	144	68.8	76.4	10.5	70 - 130	25	
Ethyl acetate	ND	2.50	ND	9.00	102	ND	ND	ND	ND	NC	70 - 130	25	
Ethylbenzene	ND	2.50	ND	10.8	112	ND	ND	ND	ND	NC	70 - 130	25	
Heptane	ND	2.50	ND	10.2	108	ND	ND	ND	ND	NC	70 - 130	25	
Hexachlorobutadiene	ND	2.50	ND	26.6	88	ND	ND	ND	ND	NC	70 - 130	25	
Hexane	ND	2.50	ND	8.81	112	ND	ND	ND	ND	NC	70 - 130	25	
Isopropylalcohol	ND	2.50	ND	6.14	105	161	186	65.7	75.8	14.3	70 - 130	25	
Isopropylbenzene	ND	2.50	ND	12.3	112	ND	ND	ND	ND	NC	70 - 130	25	
m,p-Xylene	ND	5.00	ND	21.7	118	ND	ND	ND	ND	NC	70 - 130	25	
Methyl Ethyl Ketone	ND	2.50	ND	7.37	106	12.9	13.0	4.39	4.42	NC	70 - 130	25	
Methyl tert-butyl ether(MTBE)	ND	2.50	ND	9.01	117	ND	ND	ND	ND	NC	70 - 130	25	
Methylene Chloride	ND	2.50	ND	8.68	102	ND	ND	ND	ND	NC	70 - 130	25	
n-Butylbenzene	ND	2.50	ND	13.7	94	ND	ND	ND	ND	NC	70 - 130	25	
o-Xylene	ND	2.50	ND	10.8	115	ND	ND	ND	ND	NC	70 - 130	25	
Propylene	ND	2.50	ND	4.30	106	ND	ND	ND	ND	NC	70 - 130	25	
sec-Butylbenzene	ND	2.50	ND	13.7	102	ND	ND	ND	ND	NC	70 - 130	25	
Styrene	ND	2.50	ND	10.6	118	ND	ND	ND	ND	NC	70 - 130	25	
Tetrahydrofuran	ND	2.50	ND	7.37	101	ND	ND	ND	ND	NC	70 - 130	25	
Toluene	ND	2.50	ND	9.42	115	ND	ND	ND	ND	NC	70 - 130	25	
Trans-1,2-Dichloroethene	ND	2.50	ND	9.9	110	12.4	12.6	3.14	3.19	NC	70 - 130	25	
trans-1,3-Dichloropropene	ND	2.50	ND	11.3	106	ND	ND	ND	ND	NC	70 - 130	25	
Trichlorofluoromethane	ND	2.50	ND	14.0	106	ND	ND	ND	ND	NC	70 - 130	25	
Trichlorotrifluoroethane	ND	2.50	ND	19.1	107	ND	ND	ND	ND	NC	70 - 130	25	
Vinyl Chloride	ND	2.50	ND	6.39	105	ND	ND	ND	ND	NC	70 - 130	25	
% Bromofluorobenzene	126		126		103	99	102	99	102	NC	70 - 130	25	

I = This parameter is outside laboratory LCS/LCSD specified recovery limits.

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
February 07, 2018

Wednesday, February 07, 2018

Criteria: None

State: NY

Sample Criteria Exceedances Report

GBZ84200 - 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 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

February 07, 2018 SDG I.D.: GBZ84200

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report:

AIRSIM

CHEM20 02/05/18-1: BZ84200, BZ84201

The following Initial Calibration compounds did not meet RSD% criteria: Ethyl acetate 88% (30%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: Ethyl acetate 88% (30%)

PHOENIX
Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823

CHAIN OF CUSTODY RECORD
AIR ANALYSES

800-827-5426
email: greg@phoenixlabs.com

P.O. # | Page 1 of 1

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

Report to:	Invoice to: ENVIROTRAC	Project Name: EnSafe-Westbury
Customer: EnviroTrac		Requested Deliverable: RCP ☐ ASP CAT B ☐
Address: 5 Old Dock Road		MCP ☐ NJ Deliverables ☐
Yaphank, NY 11980	Sampled by: JIM WILKINSON	State where samples collected: NY

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-14	TO-15
		THIS SECTION FOR LAB USE ONLY											MATRIX			ANALYSES	
84200	SVE INFLUENT	722	1.4	-30		NA	NA	15:58	15:55	2/1					G		4
84201	SVE EFFLUENT	835	1.4	-30		NA	NA	15:55	15:56	2/1					G		2

Relinquished by:	Accepted by:	Date:	Time:
		2-2-18	9:50
	Lindsay Burch	2-2-18	16:35

Data Format:
Excel ☑ Equis ☐ GISKey ☐
PDF ☑ Other: ☐

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:
(2) 1.4L GRAB

Requested Criteria

Quote Number:

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:

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 19, 2018

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

RE: Frost Street, 101 Frost St, Westbury, NY Order No.: 1801058

Dear Jim Wilkinson:

American Analytical Laboratories, LLC. received 1 sample(s) on 1/17/2018 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,

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#: **1801058**

19-Jan-18

CLIENT: Envirotrac

Project: Frost Street, 101 Frost St, Westbury, NY

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1801058-001A	Discharge Water		1/17/2018 1:00:00 PM	1/17/2018 2:15:00 PM	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

Company Name: EnviroTrac LTD.
Address: 5 Old Dock Road
City: Yaphank State: NY Zip:
Project Contact: Jim Wilkinson
Phone #: 631-924-3001
E-mail: JamesW@envirotrac.com

Project Information

Project Name: Frost Street
Street: 101 Frost Street
City: Westbury State: NY Zip:
Project # / Purchase Order #:
Sampler's Name / Company: Josh Levy / ETNY
Sampler's Signature:

Analytical Test / Information

VOC EPA 624

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	DI Water (5035A)	MeOH	OTHER	VOC EPA 624
1801058-001	Discharge Water	G	L	1/17/18	13:00	GL	3		3							X

Turnaround Time (Business Days)

- [✓] Standard 7-10 Business Days
- [ ] 3 Day *RUSH*
- [ ] 5 Day *RUSH*
- [ ] 2 Day *RUSH*
- [ ] 4 Day *RUSH*
- [ ] 1 Day *RUSH*

Please contact laboratory for rush service availability

SAMPLE TYPE

G = Grab
C = Composite
B = Blank

MATRIX CODE

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

ELECTRONIC DELIVERABLES

NYCRR Part 375 - please circle
Unres/ Comm/ Industrial/ Residential/ Res Residential/ PGW
NJ Soil Clean Up Criteria SCDOH Action Levels
CP 51 - Gas / Fuel TCLP Hazardous Waste
TOGS NYSDEC EQUIS

Comments / Remarks

Cooler Temp: 1.9

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

	DATE / TIME	PRINTED NAME	RECEIVED BY LAB (SIGNATURE)	DATE / TIME	PRINTED NAME
RELINQUISHED BY (SIGNATURE)	DATE 1/17/18 TIME 2:15	Josh Levy	P Masi	DATE 1/17/18 TIME 1415	P Masi
RELINQUISHED BY (SIGNATURE)	DATE TIME	PRINTED NAME	RECEIVED BY LAB (SIGNATURE)	DATE TIME	PRINTED NAME

Page 33 of 33

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: **1801058** RcptNo: **1**

Logged by:	**Lori Beyer**	**1/17/2018 2:15:00 PM**	Lori Beyer
Completed By:	**Lori Beyer**	**1/17/2018 2:38:27 PM**	Lori Beyer
Reviewed By:	**Karen Kelly**	**1/17/2018**	Karen Kelly

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: Date

By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

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#: **1801058**
Date: **1/19/2018**

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

Sample Discharge Water was analyzed using EPA Method 624.

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#: **1801058**
Date: **1/19/2018**

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

American Analytical Laboratories, LLC.

Date: *19-Jan-18*

ELAP ID : 11418

CLIENT: Envirotrac
Lab Order: 1801058
Project: Frost Street, 101 Frost St, Westbury, NY
Lab ID: 1801058-001A

Client Sample ID: Discharge Water
Collection Date: 1/17/2018 1:00:00 PM
Matrix: LIQUID

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE EPA METHOD 624			**E624**		**E624**		Analyst: **LA**
1,1,1-Trichloroethane	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
1,1,2,2-Tetrachloroethane	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
1,1,2-Trichloroethane	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
1,1-Dichloroethane	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
1,1-Dichloroethene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
1,2-Dichlorobenzene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
1,2-Dichloroethane	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
1,2-Dichloropropane	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
1,3-Dichlorobenzene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
1,4-Dichlorobenzene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
2-Chloroethyl vinyl ether	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Benzene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Bromodichloromethane	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Bromoform	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Bromomethane	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Carbon tetrachloride	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Chlorobenzene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Chloroethane	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Chloroform	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Chloromethane	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
cis-1,3-Dichloropropene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Dibromochloromethane	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Ethylbenzene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Methylene chloride	ND	5.0	5.0	U	µg/L	1	1/18/2018 7:11:00 PM
Tetrachloroethene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Toluene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
trans-1,2-Dichloroethene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
trans-1,3-Dichloropropene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Trichloroethene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Trichlorofluoromethane	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Vinyl chloride	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
Xylenes, Total	ND	0.60	6.0	U	µg/L	1	1/18/2018 7:11:00 PM
Acetone	ND	5.0	5.0	U	µg/L	1	1/18/2018 7:11:00 PM

American Analytical Laboratories, LLC.

Date: *19-Jan-18*

ELAP ID : 11418

CLIENT:	Envirotrac	**Client Sample ID:**	Discharge Water
Lab Order:	1801058	**Collection Date:**	1/17/2018 1:00:00 PM
Project:	Frost Street, 101 Frost St, Westbury, NY	**Matrix:**	LIQUID
Lab ID:	1801058-001A		

Certificate of Results

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE EPA METHOD 624			**E624**		**E624**		Analyst: **LA**
m,p-Xylene	ND	0.40	4.0	U	µg/L	1	1/18/2018 7:11:00 PM
Methyl tert-butyl ether	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM
o-Xylene	ND	0.20	2.0	U	µg/L	1	1/18/2018 7:11:00 PM

Appendix D

Daily Reports

Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Tuesday, January 2, 2018

- Summit Drilling mobilized to the site to begin sediment removal.
    - Sediment was removed until hard bottom was measured in wells EX-1A and EX-1B as shown below.

Well	Depth to Bottom				
	Design	After Redevelopment October 2017	Inspection November 2017	Prior to Removal January 2018	After Removal January 2018
EX-1A	110	107.75	106.50	106.05	108.35
EX-1B	160	157.49	157.13	156.52	158.30

EX-1B sediment

Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Wednesday, January 3, 2018

- Summit Drilling continued sediment removal.
    - Sediment was removed until hard bottom was measured in wells FSMW-8C, 8D, and 19C as shown below.

Well	Depth to Bottom				
	Design	After Redevelopment October 2017	Inspection November 2017	Prior to Removal January 2018	After Removal January 2018
FSMW-8C	182	Not measured	177.00	177.00	183.45
FSMW-8D	235	Not measured	227.25	228.90	235.90
FSMW-19C	182	Not measured	180.18	179.85	182.76

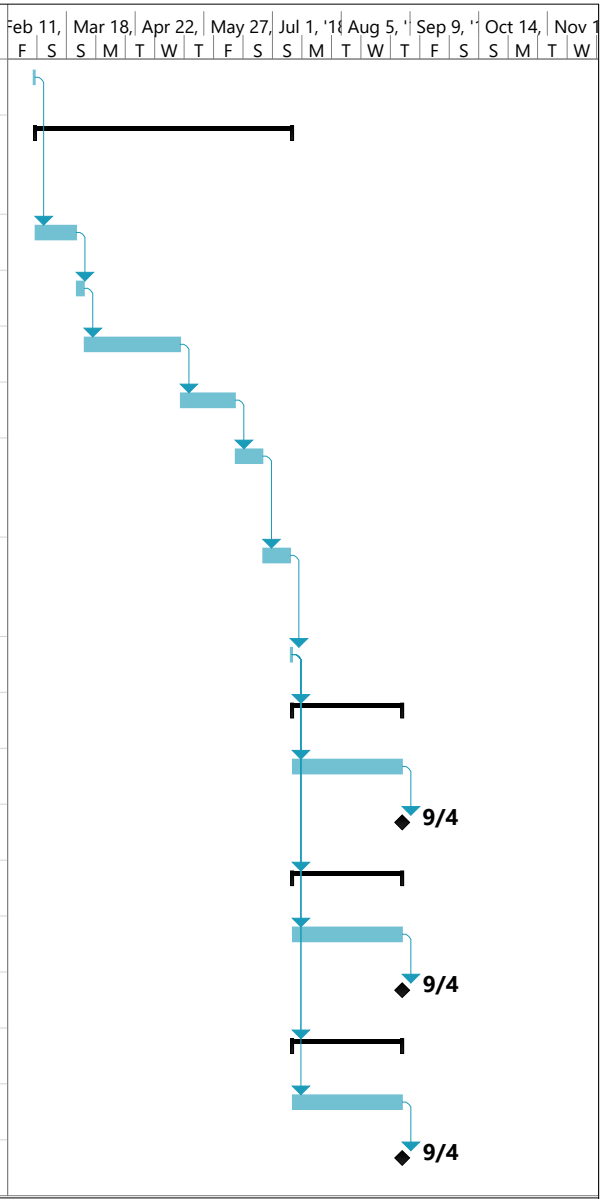
Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Friday, January 12, 2018

Envirotrac mobilized to the site to hang the pumps in the two shallow extraction wells, EX-1A and EX-1B.

Appendix E

Revised Schedule

ID	Task Name	Duration	Start	Finish	Predecessors
1	**1 Resolution of Pumping Test Scope**	1 day	Thu 3/1/18	Thu 3/1/18	
2	**2 Post-Construction Performance Monitoring and Optimization**	**93 days**	**Fri 3/2/18**	**Tue 7/10/18**	
3	2.1 Field Preparation	3 wks	Fri 3/2/18	Thu 3/22/18	1
4	2.2 Temporary System Startup and Testing	2 days	Fri 3/23/18	Mon 3/26/18	3
5	2.3 Pumping Test	7 wks	Tue 3/27/18	Mon 5/14/18	4
6	2.4 Develop and Submit Letter Report to NYSDEC	4 wks	Tue 5/15/18	Mon 6/11/18	5
7	2.5 NYSDEC Review and Approval of Letter Report and Proposed Pumping Rates	2 wks	Tue 6/12/18	Mon 6/25/18	6
8	2.6 Procure and Install EX-1C and/or EX-1D Pumps (If Required)	2 wks	Tue 6/26/18	Mon 7/9/18	7
9	2.7 Full System Startup	1 day	Tue 7/10/18	Tue 7/10/18	8
10	**3 Final Engineering Report**	**40 days**	**Wed 7/11/18**	**Tue 9/4/18**	**9**
11	3.1 Develop FER	8 wks	Wed 7/11/18	Tue 9/4/18	9
12	3.2 Submit FER to NYSDEC	0 days	Tue 9/4/18	Tue 9/4/18	11
13	**4 Site Management Plan**	**40 days**	**Wed 7/11/18**	**Tue 9/4/18**	9
14	4.1 Develop SMP	8 wks	Wed 7/11/18	Tue 9/4/18	9
15	4.2 Submit SMP to NYSDEC	0 days	Tue 9/4/18	Tue 9/4/18	14
16	**5 Environmental Easement**	**40 days**	**Wed 7/11/18**	**Tue 9/4/18**	9
17	5.1 Develop Environmental Easement	8 wks	Wed 7/11/18	Tue 9/4/18	9
18	5.2 Submit Environmental Easement to NYSDEC	0 days	Tue 9/4/18	Tue 9/4/18	17



Schedule
February 2018

Task	Inactive Task	Manual Summary Rollup	External Milestone
Split	Inactive Milestone	Manual Summary	Deadline
Milestone	Inactive Summary	Start-only	Progress
Summary	Manual Task	Finish-only	Manual Progress
Project Summary	Duration-only	External Tasks	