November 11, 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: October 2019
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 October 2019 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 October 2019.

- Quantitative sampling of the SVE system granular activated carbon influent and effluent air flow was conducted on October 17, 2019, using Summa canisters. These samples were obtained by EnviroTrac, submitted to Phoenix Environmental Laboratories, and analyzed by Method TO-15. Results are included in Appendix B.

  — Photoionization detector readings and influent concentrations of Frost Street-related contaminants of concern (tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, and vinyl chloride [17,363 µg/m^3]) continue to indicate significant mass extraction.

  — Effluent concentrations are below the carbon exchange indicator concentrations. The cis-1,2-dichloroethene concentration is approaching the concentration, so a carbon exchanged is being scheduled for early 2020.

Frost Street Sites Effluent Compliance			
System Flow Rate =		800	ft^3/m
Compound	**Annual Mass Emission Limit (lbs/year)**	**Carbon Exchange Required Indicator Concentration ($\mu g/m^3$)[2]**	**October 2019 Effluent Concentration ($\mu g/m^3$)**
Trichloroethene	500	19,000	16.1
Tetrachloroethene	1,000	38,000	5.52
Vinyl Chloride	100	3,800	ND
Cis-1,2-Dichloroethene[1]	100	3,800	2,330

Notes:

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

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

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

Groundwater Extraction 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 October except for October 16 (7:30 pm) to October 18 (10:00 am) when the system was down or at reduced capacity due to weather (high winds and subsequent power outage).

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 third quarter 2019 groundwater sampling event was completed the week of September 16, 2019. The data will be submitted in a forthcoming report, once 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.

Sincerely,

EnSafe, Inc., by

Alexandra M. J. Stark

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: 2-Oct
Weather / Temp: Sunny / 70 DEG
Technician / Operator: JW

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

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)	4700	923	Blower 1 Total Runtime (hrs)	56,352.4
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	54,550.6
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)	34		VGAC-1 Influent PID (ppm)	3.0
VGAC-1 Effluent Vacuum ("H2O)	35		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	30		VGAC-2 Influent PID (ppm)	3.0
VGAC-2 Effluent Vacuum ("H2O)	35		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Vacuum ("H2O)	40		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Vacuum ("H2O)	45		VGAC-3 Effluent PID (ppm)	0.0
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	15			
Transfer Pump Total Runtime (hrs)	25,035.9		Condensate Storage Tank Level (gal)	100

SVE Manifold Legs - Vacuum/Flow Rate/PID

	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	38	6000	131		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	32	3700	81	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	38	3500	76		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	32	2500	55	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	30	4500	98		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	34	5500	120	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	30	3600	79		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	30	2500	55	

Air Sparge System

Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	82
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	191
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	35,122
Manifold Regulator Pressure (psi)	80		

AS Manifold Legs - Pressure/Flow Rate

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

Notes, Comments & Observations:

AS-4 pipe cracked on manifold, shut off.

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: 9-Oct
Weather / Temp: Rain / 60 DEG
Technician / Operator: JW

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

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)	4800	942	Blower 1 Total Runtime (hrs)	56,439.3
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	54,634.4
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)	34		VGAC-1 Influent PID (ppm)	3.5
VGAC-1 Effluent Vacuum ("H2O)	35		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	30		VGAC-2 Influent PID (ppm)	3.5
VGAC-2 Effluent Vacuum ("H2O)	35		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Vacuum ("H2O)	40		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Vacuum ("H2O)	45		VGAC-3 Effluent PID (ppm)	0.0
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	15			
Transfer Pump Total Runtime (hrs)	25,035.9		Condensate Storage Tank Level (gal)	100

SVE Manifold Legs - Vacuum/Flow Rate/PID									
	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	38	5800	127		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	32	3700	81	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	38	3700	81		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	32	2700	59	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	30	4000	87		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	34	5500	120	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	30	3500	76		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	30	3000	65	

Air Sparge System			
Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	90
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	180
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	35,293
Manifold Regulator Pressure (psi)	80		

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

Notes, Comments & Observations:

AS-4 pipe cracked on manifold, shut off.

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-Oct
Weather / Temp: Cloudy / 50 DEG
Technician / Operator: JW

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

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)	4800	942	Blower 1 Total Runtime (hrs)	56,439.3
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	54,634.4
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)	34		VGAC-1 Influent PID (ppm)	3.5
VGAC-1 Effluent Vacuum ("H2O)	35		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	30		VGAC-2 Influent PID (ppm)	3.5
VGAC-2 Effluent Vacuum ("H2O)	35		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Vacuum ("H2O)	40		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Vacuum ("H2O)	45		VGAC-3 Effluent PID (ppm)	0.0
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	15			
Transfer Pump Total Runtime (hrs)	25,035.9		Condensate Storage Tank Level (gal)	100

SVE Manifold Legs - Vacuum/Flow Rate/PID									
	Vacuum	**Velocity**	**Flow Rate**	**PID**		**Vacuum**	**Velocity**	**Flow Rate**	**PID**
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	40	6000	131		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	36	4000	87	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	42	3700	81		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	36	2700	59	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	36	4600	100		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	36	5500	120	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	36	4200	92		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	36	3000	65	

Air Sparge System			
Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	90
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	180
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	35,293
Manifold Regulator Pressure (psi)	80		

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

Notes, Comments & Observations:

AS-4 pipe cracked on manifold, shut off.

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-Oct
Weather / Temp: Clear / 65 DEG
Technician / Operator: JW

Arrival Time: 9:00
Departure Time: 11:30

System Status

	Arrival	Departure		Arrival	Departure
SVE Blower 1 (ON/OFF)	OFF	ON	Sensaphone (ON/OFF)	ON	ON
SVE Blower 2 (ON/OFF)	ON	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)	4150	815	Blower 1 Total Runtime (hrs)	56,605.6
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	54,801.1
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)	34		VGAC-1 Influent PID (ppm)	6.0
VGAC-1 Effluent Vacuum ("H2O)	35		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	30		VGAC-2 Influent PID (ppm)	6.0
VGAC-2 Effluent Vacuum ("H2O)	35		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Vacuum ("H2O)	40		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Vacuum ("H2O)	45		VGAC-3 Effluent PID (ppm)	0.0
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	15			
Transfer Pump Total Runtime (hrs)	25,035.9		Condensate Storage Tank Level (gal)	100

SVE Manifold Legs - Vacuum/Flow Rate/PID

	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	40	7000	153	5.0	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	34	4000	87	0.0
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	44	4000	87	8.6	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	34	2900	63	0.0
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	36	4700	103	0.0	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	34	5500	120	18.5
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	34	4100	89	0.0	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	36	2900	63	0.0

Air Sparge System

Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	94
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	185
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	35,610
Manifold Regulator Pressure (psi)	82		

AS Manifold Legs - Pressure/Flow Rate

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

Notes, Comments & Observations:

Repaired AS-4 manifold piping, will turn back on next week.

Collected monthly samples

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

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

Date: 30-Oct
Weather / Temp: Cloudy / 55 DEG
Technician / Operator: JW

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

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)	4800	942	Blower 1 Total Runtime (hrs)	56,688.9
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	54,885.1
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)	34		VGAC-1 Influent PID (ppm)	2.7
VGAC-1 Effluent Vacuum ("H2O)	35		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	30		VGAC-2 Influent PID (ppm)	2.7
VGAC-2 Effluent Vacuum ("H2O)	35		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Vacuum ("H2O)	40		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Vacuum ("H2O)	45		VGAC-3 Effluent PID (ppm)	0.0
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	15			
Transfer Pump Total Runtime (hrs)	25,035.9		Condensate Storage Tank Level (gal)	100

SVE Manifold Legs - Vacuum/Flow Rate/PID									
	Vacuum	**Velocity**	**Flow Rate**	**PID**		**Vacuum**	**Velocity**	**Flow Rate**	**PID**
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	42	6500	142		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	35	4100	89	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	44	400	9		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	36	2900	63	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	36	4700	103		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	34	6000	131	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	34	4200	92		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	36	3000	65	

Air Sparge System			
Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	94
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	185
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	35,777
Manifold Regulator Pressure (psi)	84		

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

Notes, Comments & Observations:

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

Wednesday, October 30, 2019

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

Project ID: **ENSAFE-WESTBURY**
SDG ID: **GCE47375**
Sample ID#s: **CE47375 - CE47376**

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

October 30, 2019

SDG I.D.: GCE47375

Project ID: ENSAFE-WESTBURY

Client Id	Lab Id	Matrix
SVE EFFLUENT	CE47375	AIR
SVE INFLUENT	CE47376	AIR

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

October 30, 2019

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

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	JW	10/17/19	12:11
Location Code:	ENVIROTR	Received by:	CP	10/24/19	16:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	775				

Laboratory Data

SDG ID: GCE47375
Phoenix ID: CE47375

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	*0.729*	ND	*5.00*	10/26/19	KCA	5	1
1,1,1-Trichloroethane	ND	*0.917*	ND	*5.00*	10/26/19	KCA	5	
1,1,2,2-Tetrachloroethane	ND	*0.729*	ND	*5.00*	10/26/19	KCA	5	
1,1,2-Trichloroethane	ND	*0.917*	ND	*5.00*	10/26/19	KCA	5	
1,1-Dichloroethane	ND	*1.24*	ND	*5.02*	10/26/19	KCA	5	
1,1-Dichloroethene	0.485	*0.252*	1.92	*1.00*	10/26/19	KCA	5	
1,2,4-Trichlorobenzene	ND	*0.674*	ND	*5.00*	10/26/19	KCA	5	
1,2,4-Trimethylbenzene	ND	*1.02*	ND	*5.01*	10/26/19	KCA	5	
1,2-Dibromoethane(EDB)	ND	*0.651*	ND	*5.00*	10/26/19	KCA	5	
1,2-Dichlorobenzene	ND	*0.832*	ND	*5.00*	10/26/19	KCA	5	
1,2-Dichloroethane	ND	*1.24*	ND	*5.02*	10/26/19	KCA	5	
1,2-dichloropropane	ND	*1.08*	ND	*4.99*	10/26/19	KCA	5	
1,2-Dichlorotetrafluoroethane	ND	*0.716*	ND	*5.00*	10/26/19	KCA	5	
1,3,5-Trimethylbenzene	ND	*1.02*	ND	*5.01*	10/26/19	KCA	5	
1,3-Butadiene	ND	*2.26*	ND	*5.00*	10/26/19	KCA	5	
1,3-Dichlorobenzene	ND	*0.832*	ND	*5.00*	10/26/19	KCA	5	
1,4-Dichlorobenzene	ND	*0.832*	ND	*5.00*	10/26/19	KCA	5	
1,4-Dioxane	ND	*1.39*	ND	*5.01*	10/26/19	KCA	5	
2-Hexanone(MBK)	ND	*1.22*	ND	*4.99*	10/26/19	KCA	5	1
4-Ethyltoluene	ND	*1.02*	ND	*5.01*	10/26/19	KCA	5	1
4-Isopropyltoluene	ND	*0.911*	ND	*5.00*	10/26/19	KCA	5	1
4-Methyl-2-pentanone(MIBK)	ND	*1.22*	ND	*4.99*	10/26/19	KCA	5	
Acetone	2.90	*2.11*	6.88	*5.01*	10/26/19	KCA	5	
Acrylonitrile	ND	*2.31*	ND	*5.01*	10/26/19	KCA	5	
Benzene	ND	*1.57*	ND	*5.01*	10/26/19	KCA	5	
Benzyl chloride	ND	*0.966*	ND	*5.00*	10/26/19	KCA	5	

Project ID: ENSAFE-WESTBURY
Client ID: SVE EFFLUENT

Phoenix I.D.: CE47375

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.747*	ND	*5.00*	10/26/19	KCA	5	
Bromoform	ND	*0.484*	ND	*5.00*	10/26/19	KCA	5	
Bromomethane	ND	*1.29*	ND	*5.01*	10/26/19	KCA	5	
Carbon Disulfide	ND	*1.61*	ND	*5.01*	10/26/19	KCA	5	
Carbon Tetrachloride	ND	*0.159*	ND	*1.00*	10/26/19	KCA	5	
Chlorobenzene	ND	*1.09*	ND	*5.01*	10/26/19	KCA	5	
Chloroethane	ND	*1.90*	ND	*5.01*	10/26/19	KCA	5	
Chloroform	ND	*1.02*	ND	*4.98*	10/26/19	KCA	5	
Chloromethane	ND	*2.42*	ND	*4.99*	10/26/19	KCA	5	
Cis-1,2-Dichloroethene	589	*1.51*	2330	*5.98*	10/28/19	KCA	30	
cis-1,3-Dichloropropene	ND	*1.10*	ND	*4.99*	10/26/19	KCA	5	
Cyclohexane	ND	*1.45*	ND	*4.99*	10/26/19	KCA	5	
Dibromochloromethane	ND	*0.587*	ND	*5.00*	10/26/19	KCA	5	
Dichlorodifluoromethane	ND	*1.01*	ND	*4.99*	10/26/19	KCA	5	
Ethanol	4.09	*2.66*	7.70	*5.01*	10/26/19	KCA	5	1
Ethyl acetate	ND	*1.39*	ND	*5.01*	10/26/19	KCA	5	1
Ethylbenzene	ND	*1.15*	ND	*4.99*	10/26/19	KCA	5	
Heptane	ND	*1.22*	ND	*5.00*	10/26/19	KCA	5	
Hexachlorobutadiene	ND	*0.469*	ND	*5.00*	10/26/19	KCA	5	
Hexane	ND	*1.42*	ND	*5.00*	10/26/19	KCA	5	
Isopropylalcohol	ND	*2.04*	ND	*5.01*	10/26/19	KCA	5	
Isopropylbenzene	ND	*1.02*	ND	*5.01*	10/26/19	KCA	5	
m,p-Xylene	ND	*1.15*	ND	*4.99*	10/26/19	KCA	5	
Methyl Ethyl Ketone	ND	*1.70*	ND	*5.01*	10/26/19	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	*1.39*	ND	*5.01*	10/26/19	KCA	5	
Methylene Chloride	ND	*4.32*	ND	*15.0*	10/26/19	KCA	5	
n-Butylbenzene	ND	*0.911*	ND	*5.00*	10/26/19	KCA	5	1
o-Xylene	ND	*1.15*	ND	*4.99*	10/26/19	KCA	5	
Propylene	ND	*2.91*	ND	*5.01*	10/26/19	KCA	5	1
sec-Butylbenzene	ND	*0.911*	ND	*5.00*	10/26/19	KCA	5	1
Styrene	ND	*1.17*	ND	*4.98*	10/26/19	KCA	5	
Tetrachloroethene	0.815	*0.184*	5.52	*1.25*	10/26/19	KCA	5	
Tetrahydrofuran	ND	*1.70*	ND	*5.01*	10/26/19	KCA	5	1
Toluene	ND	*1.33*	ND	*5.01*	10/26/19	KCA	5	
Trans-1,2-Dichloroethene	8.31	*1.26*	32.9	*4.99*	10/26/19	KCA	5	
trans-1,3-Dichloropropene	ND	*1.10*	ND	*4.99*	10/26/19	KCA	5	
Trichloroethene	2.99	*0.186*	16.1	*1.00*	10/26/19	KCA	5	
Trichlorofluoromethane	1.48	*0.891*	8.31	*5.00*	10/26/19	KCA	5	
Trichlorotrifluoroethane	0.780	*0.653*	5.97	*5.00*	10/26/19	KCA	5	
Vinyl Chloride	ND	*0.391*	ND	*1.00*	10/26/19	KCA	5	
QA/QC Surrogates/Internals								
% Bromofluorobenzene (5x)	93	%	93	%	10/26/19	KCA	5	
% IS-1,4-Difluorobenzene (5x)	99	%	99	%	10/26/19	KCA	5	
% IS-Bromochloromethane (5x)	73	%	73	%	10/26/19	KCA	5	
% IS-Chlorobenzene-d5 (5x)	103	%	103	%	10/26/19	KCA	5	
% Bromofluorobenzene (30x)	97	%	97	%	10/28/19	KCA	30	
% IS-1,4-Difluorobenzene (30x)	111	%	111	%	10/28/19	KCA	30	
% IS-Bromochloromethane (30x)	92	%	92	%	10/28/19	KCA	30	
% IS-Chlorobenzene-d5 (30x)	112	%	112	%	10/28/19	KCA	30	

Ver 1

Project ID: ENSAFE-WESTBURY
Client ID: SVE EFFLUENT

Phoenix I.D.: CE47375

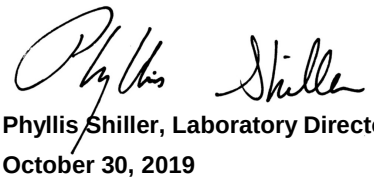
Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution

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.

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
October 30, 2019
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

Analysis Report

October 30, 2019

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

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	JW	10/17/19	12:01
Location Code:	ENVIROTR	Received by:	CP	10/24/19	16:40
Rush Request:	Standard	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	749				

Laboratory Data

SDG ID: GCE47375
Phoenix ID: CE47376

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*	10/26/19	KCA	5	1
1,1,1-Trichloroethane	ND	*0.917*	ND	*5.00*	10/26/19	KCA	5	
1,1,2,2-Tetrachloroethane	ND	*0.729*	ND	*5.00*	10/26/19	KCA	5	
1,1,2-Trichloroethane	ND	*0.917*	ND	*5.00*	10/26/19	KCA	5	
1,1-Dichloroethane	ND	*1.24*	ND	*5.02*	10/26/19	KCA	5	
1,1-Dichloroethene	ND	*0.252*	ND	*1.00*	10/26/19	KCA	5	
1,2,4-Trichlorobenzene	ND	*0.674*	ND	*5.00*	10/26/19	KCA	5	
1,2,4-Trimethylbenzene	ND	*1.02*	ND	*5.01*	10/26/19	KCA	5	
1,2-Dibromoethane(EDB)	ND	*0.651*	ND	*5.00*	10/26/19	KCA	5	
1,2-Dichlorobenzene	ND	*0.832*	ND	*5.00*	10/26/19	KCA	5	
1,2-Dichloroethane	ND	*1.24*	ND	*5.02*	10/26/19	KCA	5	
1,2-dichloropropane	ND	*1.08*	ND	*4.99*	10/26/19	KCA	5	
1,2-Dichlorotetrafluoroethane	ND	*0.716*	ND	*5.00*	10/26/19	KCA	5	
1,3,5-Trimethylbenzene	ND	*1.02*	ND	*5.01*	10/26/19	KCA	5	
1,3-Butadiene	ND	*2.26*	ND	*5.00*	10/26/19	KCA	5	
1,3-Dichlorobenzene	ND	*0.832*	ND	*5.00*	10/26/19	KCA	5	
1,4-Dichlorobenzene	ND	*0.832*	ND	*5.00*	10/26/19	KCA	5	
1,4-Dioxane	ND	*1.39*	ND	*5.01*	10/26/19	KCA	5	
2-Hexanone(MBK)	ND	*1.22*	ND	*4.99*	10/26/19	KCA	5	1
4-Ethyltoluene	ND	*1.02*	ND	*5.01*	10/26/19	KCA	5	1
4-Isopropyltoluene	ND	*0.911*	ND	*5.00*	10/26/19	KCA	5	1
4-Methyl-2-pentanone(MIBK)	ND	*1.22*	ND	*4.99*	10/26/19	KCA	5	
Acetone	6.68	*2.11*	15.9	*5.01*	10/26/19	KCA	5	
Acrylonitrile	ND	*2.31*	ND	*5.01*	10/26/19	KCA	5	
Benzene	ND	*1.57*	ND	*5.01*	10/26/19	KCA	5	
Benzyl chloride	ND	*0.966*	ND	*5.00*	10/26/19	KCA	5	

Project ID: ENSAFE-WESTBURY
Client ID: SVE INFLUENT

Phoenix I.D.: CE47376

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.747*	ND	*5.00*	10/26/19	KCA	5	
Bromoform	ND	*0.484*	ND	*5.00*	10/26/19	KCA	5	
Bromomethane	ND	*1.29*	ND	*5.01*	10/26/19	KCA	5	
Carbon Disulfide	ND	*1.61*	ND	*5.01*	10/26/19	KCA	5	
Carbon Tetrachloride	ND	*0.159*	ND	*1.00*	10/26/19	KCA	5	
Chlorobenzene	ND	*1.09*	ND	*5.01*	10/26/19	KCA	5	
Chloroethane	ND	*1.90*	ND	*5.01*	10/26/19	KCA	5	
Chloroform	ND	*1.02*	ND	*4.98*	10/26/19	KCA	5	
Chloromethane	ND	*2.42*	ND	*4.99*	10/26/19	KCA	5	
Cis-1,2-Dichloroethene	120	*0.252*	475	*1.00*	10/26/19	KCA	5	
cis-1,3-Dichloropropene	ND	*1.10*	ND	*4.99*	10/26/19	KCA	5	
Cyclohexane	ND	*1.45*	ND	*4.99*	10/26/19	KCA	5	
Dibromochloromethane	ND	*0.587*	ND	*5.00*	10/26/19	KCA	5	
Dichlorodifluoromethane	ND	*1.01*	ND	*4.99*	10/26/19	KCA	5	
Ethanol	6.88	*2.66*	13.0	*5.01*	10/26/19	KCA	5	1
Ethyl acetate	ND	*1.39*	ND	*5.01*	10/26/19	KCA	5	1
Ethylbenzene	ND	*1.15*	ND	*4.99*	10/26/19	KCA	5	
Heptane	ND	*1.22*	ND	*5.00*	10/26/19	KCA	5	
Hexachlorobutadiene	ND	*0.469*	ND	*5.00*	10/26/19	KCA	5	
Hexane	ND	*1.42*	ND	*5.00*	10/26/19	KCA	5	
Isopropylalcohol	3.55	*2.04*	8.72	*5.01*	10/26/19	KCA	5	
Isopropylbenzene	ND	*1.02*	ND	*5.01*	10/26/19	KCA	5	
m,p-Xylene	ND	*1.15*	ND	*4.99*	10/26/19	KCA	5	
Methyl Ethyl Ketone	ND	*1.70*	ND	*5.01*	10/26/19	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	*1.39*	ND	*5.01*	10/26/19	KCA	5	
Methylene Chloride	ND	*4.32*	ND	*15.0*	10/26/19	KCA	5	
n-Butylbenzene	ND	*0.911*	ND	*5.00*	10/26/19	KCA	5	1
o-Xylene	ND	*1.15*	ND	*4.99*	10/26/19	KCA	5	
Propylene	ND	*2.91*	ND	*5.01*	10/26/19	KCA	5	1
sec-Butylbenzene	ND	*0.911*	ND	*5.00*	10/26/19	KCA	5	1
Styrene	ND	*1.17*	ND	*4.98*	10/26/19	KCA	5	
Tetrachloroethene	2340	*2.77*	15900	*18.8*	10/28/19	KCA	75	
Tetrahydrofuran	ND	*1.70*	ND	*5.01*	10/26/19	KCA	5	1
Toluene	ND	*1.33*	ND	*5.01*	10/26/19	KCA	5	
Trans-1,2-Dichloroethene	1.54	*1.26*	6.10	*4.99*	10/26/19	KCA	5	
trans-1,3-Dichloropropene	ND	*1.10*	ND	*4.99*	10/26/19	KCA	5	
Trichloroethene	184	*0.186*	988	*1.00*	10/26/19	KCA	5	
Trichlorofluoromethane	ND	*0.891*	ND	*5.00*	10/26/19	KCA	5	
Trichlorotrifluoroethane	ND	*0.653*	ND	*5.00*	10/26/19	KCA	5	
Vinyl Chloride	ND	*0.391*	ND	*1.00*	10/26/19	KCA	5	
QA/QC Surrogates/Internals								
% Bromofluorobenzene (5x)	102	*%*	102	*%*	10/26/19	KCA	5	
% IS-1,4-Difluorobenzene (5x)	69	*%*	69	*%*	10/26/19	KCA	5	
% IS-Bromochloromethane (5x)	80	*%*	80	*%*	10/26/19	KCA	5	
% IS-Chlorobenzene-d5 (5x)	93	*%*	93	*%*	10/26/19	KCA	5	
% Bromofluorobenzene (75x)	104	*%*	104	*%*	10/28/19	KCA	75	
% IS-1,4-Difluorobenzene (75x)	104	*%*	104	*%*	10/28/19	KCA	75	
% IS-Bromochloromethane (75x)	113	*%*	113	*%*	10/28/19	KCA	75	
% IS-Chlorobenzene-d5 (75x)	91	*%*	91	*%*	10/28/19	KCA	75	

Ver 1

Project ID: ENSAFE-WESTBURY
Client ID: SVE INFLUENT

Phoenix I.D.: CE47376

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.

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
October 30, 2019
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

QA/QC Report

October 30, 2019

QA/QC Data

SDG I.D.: GCE47375

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 503555 (ppbv), QC Sample No: CE47380 (CE47375 (5X) , CE47376 (5X))												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.150	ND	1.03	97	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.180	ND	0.98	99	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.150	ND	1.03	93	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	98	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.050	ND	0.20	98	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.130	ND	0.96	84	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.200	ND	0.98	103	1.88	1.94	0.383	0.394	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.170	ND	1.02	98	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.250	ND	1.01	106	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.220	ND	1.02	105	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.140	ND	0.98	88	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.200	ND	0.98	100	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.450	ND	0.99	87	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	98	79.3	80.5	13.2	13.4	1.5	70 - 130	25
1,4-Dioxane	ND	0.280	ND	1.01	113	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.240	ND	0.98	83	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.200	ND	0.98	94	1.03	1.07	0.210	0.217	NC	70 - 130	25
4-Isopropyltoluene	ND	0.180	ND	0.99	99	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.240	ND	0.98	98	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.420	ND	1.00	113	161	156	67.7	65.8	2.8	70 - 130	25
Acrylonitrile	ND	0.460	ND	1.00	88	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.310	ND	0.99	94	ND	ND	ND	ND	NC	70 - 130	25
Benzyl chloride	ND	0.190	ND	0.98	119	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.150	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.097	ND	1.00	112	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.260	ND	1.01	94	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.320	ND	1.00	94	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.032	ND	0.20	110	0.50	0.45	0.080	0.072	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	93	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.200	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25
Chloromethane	ND	0.480	ND	0.99	71	1.40	1.41	0.679	0.682	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.256	ND	1.01	105	ND	ND	ND	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	108	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.290	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.120	ND	1.02	109	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.200	ND	0.99	112	2.02	1.98	0.408	0.400	NC	70 - 130	25
Ethanol	ND	0.530	ND	1.00	99	12.6	12.0	6.68	6.39	4.4	70 - 130	25

QA/QC Data

SDG I.D.: GCE47375

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	105	8.25	8.17	2.29	2.27	0.9	70 - 130	25	
Ethylbenzene	ND	0.230	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25	
Heptane	ND	0.240	ND	0.98	97	ND	ND	ND	ND	NC	70 - 130	25	
Hexachlorobutadiene	ND	0.094	ND	1.00	88	ND	ND	ND	ND	NC	70 - 130	25	
Hexane	ND	0.280	ND	0.99	113	1.26	1.35	0.358	0.383	NC	70 - 130	25	
Isopropylalcohol	ND	0.410	ND	1.01	91	7.17	7.10	2.92	2.89	1.0	70 - 130	25	
Isopropylbenzene	ND	0.200	ND	0.98	103	ND	ND	ND	ND	NC	70 - 130	25	
m,p-Xylene	ND	0.230	ND	1.00	104	2.48	2.60	0.572	0.598	NC	70 - 130	25	
Methyl Ethyl Ketone	ND	0.340	ND	1.00	99	1.95	1.88	0.663	0.637	NC	70 - 130	25	
Methyl tert-butyl ether(MTBE)	ND	0.280	ND	1.01	91	ND	ND	ND	ND	NC	70 - 130	25	
Methylene Chloride	ND	0.860	ND	2.99	99	ND	ND	ND	ND	NC	70 - 130	25	
n-Butylbenzene	ND	0.180	ND	0.99	99	ND	ND	ND	ND	NC	70 - 130	25	
o-Xylene	ND	0.230	ND	1.00	107	ND	1.05	ND	0.242	NC	70 - 130	25	
Propylene	ND	0.580	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25	
sec-Butylbenzene	ND	0.180	ND	0.99	97	ND	ND	ND	ND	NC	70 - 130	25	
Styrene	ND	0.230	ND	0.98	99	ND	ND	ND	ND	NC	70 - 130	25	
Tetrachloroethene	ND	0.037	ND	0.25	101	1.15	1.16	0.169	0.171	NC	70 - 130	25	
Tetrahydrofuran	ND	0.340	ND	1.00	92	4.04	4.27	1.37	1.45	NC	70 - 130	25	
Toluene	ND	0.270	ND	1.02	106	2.20	2.27	0.585	0.602	NC	70 - 130	25	
Trans-1,2-Dichloroethene	ND	0.250	ND	0.99	93	ND	ND	ND	ND	NC	70 - 130	25	
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25	
Trichloroethene	ND	0.037	ND	0.20	102	0.24	0.25	0.045	0.047	NC	70 - 130	25	
Trichlorofluoromethane	ND	0.180	ND	1.01	96	1.86	1.79	0.332	0.319	NC	70 - 130	25	
Trichlorotrifluoroethane	ND	0.130	ND	1.00	97	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	92	%	92	%	100	99	98	99	98	NC	70 - 130	25	
% IS-1,4-Difluorobenzene	141	%	141	%	86	103	105	103	105	NC	60 - 140	25	s
% IS-Bromochloromethane	165	%	165	%	79	99	103	99	103	NC	60 - 140	25	s
% IS-Chlorobenzene-d5	130	%	130	%	91	105	106	105	106	NC	60 - 140	25	
QA/QC Batch 503564 (ppbv), QC Sample No: CE47404 (CE47375 (30X) , CE47376 (75X))													
Volatiles													
Cis-1,2-Dichloroethene	ND	0.256	ND	1.01	107	ND	ND	ND	ND	NC	70 - 130	25	
Tetrachloroethene	ND	0.037	ND	0.25	105	165	165	24.3	24.4	0.4	70 - 130	25	
% Bromofluorobenzene	94	%	94	%	100	106	106	106	106	NC	70 - 130	25	
% IS-1,4-Difluorobenzene	121	%	121	%	78	97	97	97	97	NC	60 - 140	25	
% IS-Bromochloromethane	132	%	132	%	71	101	99	101	99	NC	60 - 140	25	
% IS-Chlorobenzene-d5	114	%	114	%	83	92	92	92	92	NC	60 - 140	25	

s = This parameter is outside laboratory Blank Surrogate 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
October 30, 2019

Wednesday, October 30, 2019

Criteria: None

State: NY

Sample Criteria Exceedances Report

GCE47375 - 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

October 30, 2019 SDG I.D.: GCE47375

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

Cooler: Yes ☒ No ☐
Coolant: IPK ☒ ICE ☐ No ☐
Temp 2.1 °C Pg of

PHOENIX Environmental Laboratories, Inc.

NY/NJ CHAIN OF CUSTODY RECORD

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Email: info@phoenixlabs.com Fax (860) 645-0823
Client Services (860) 645-8726

Contact Options:
☐ Fax:
☐ Phone:
☐ Email:

Customer: **Allied Pollution Control**
Address: **1273 Route 311**
Patterson, NY 12563

Project:
Report to: **Mr. John Muro II**
Invoice to: **Mr. John Muro II**
Phone #: **845-878-0007**
Fax #: **845-878-2104**

Project P.O: **APC**

This section MUST be completed with Bottle Quantities.

Client Sample - Information - Identification

Sampler's Signature: Brian Vogt Date: 10/24/19

Matrix Code:
DW=Drinking Water **GW**=Ground Water **SW**=Surface Water **WW**=Waste Water
RW=Raw Water **SE**=Sediment **SL**=Sludge **S**=Soil **SD**=Solid **W**=Wipe
OIL=Oil **B**=Bulk **L**=Liquid

Analysis Request

PHOENIX USE ONLY SAMPLE #	Customer Sample Identification	Sample Matrix	Date Sampled	Time Sampled	Total Coli	Ortho	Soil VOA Vials [ ] methanol [ ] H2O	GL Soil container ( )oz	GL Soil container ( )oz	40 ml VOA Vial [ ] As is [ ] HCl	GL Amber 1000ml [ ] As is [ ] H2SO4	PL As is [ ]250ml [ ] 500ml [ ] 1000ml	PL H2SO4 [ ]250ml [ ] 500ml	PL HNO3 250ml	PL HNO3 250ml	Bacteria Bottle w/thio	Bacteria Bottle as is
47348	Mens Room	DW	10/24	9:00	X											X	
47349	Mens Room	DW	10/24	9:00		X						X					

Relinquished by:	Accepted by:	Date:	Time:
[signature]	[signature]	10/24/19	1230
[signature]	[signature]	10/24/19	1500
	Kristal Hall	10/24/19	16:40

Comments, Special Requirements or Regulations:

Turnaround:
☐ 1 Day*
☐ 2 Days*
☐ 3 Days*
☒ 5 Days
☐ 10 Days
☐ Other

* SURCHARGE APPLIES

NJ
☐ Res. Criteria
☐ Non-Res. Criteria
☐ Impact to GW Soil Cleanup Criteria
☐ Impact to GW soil screen Criteria
☐ GW Criteria

What State were samples collected? ________

NY
☐ TOGS GW
☐ CP-51 SOIL
☐ 375SCO Unrestricted Soil
☐ 375SCO Residential Soil
☐ 375SCO Residential Restricted Soil
☐ 375SCO Commercial Soil
☐ 375SCO Industrial Soil
☐ Subpart 5 DW

Data Format
☐ Phoenix Std Report
☐ Excel
☐ PDF
☐ GIS/Key
☐ EQuIS
☐ NJ Hazsite EDD
☐ NY EZ EDD (ASP)
☐ Other ________

Data Package
☐ NJ Reduced Deliv. *
☐ NY Enhanced (ASP B) *
☐ Other

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
Customer: EnviroTrac
Address: 5 Old Dock Rd
Yaphank, NY 11980

Invoice to: EnviroTrac

Sampled by: JIM WILKINSON

Project Name: EnSafe - Westbury

Requested Deliverable:
RCP ☐ ASP CAT B ☐
MCP ☐ NJ Deliverables ☐

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	
47375	SVE Effluent	775	1.4	-30		NA	NA	12:10	12:11	10/17					G		✓
47376	SVE Influent	749	1.4	-30		NA	NA	12:00	12:01	↓					G		✓

Relinquished by: [signature] Date: 10-24-12 Time: 11:45

Accepted by: [signature] Date: 10-24 Time: 1428

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

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