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

September 10, 2019

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

Re: Progress Report: August 2019
Frost Street Sites: Site ID #s 1-30043 I, L, M
New Cassel Industrial Area, Westbury, New York

Dear Mr. DeCandia:

EnSafe Inc. is pleased to submit this Progress Report for the Frost Street Sites (Site ID #s 1-30043 I, L, M) for work completed in August 2019.

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**). No alarm calls were received in August 2019.
- The Frost Street Parties submitted a proposal for system reconfiguration/optimization to support site redevelopment efforts on September 27, 2018. NYSDEC preliminary comments were received via email on December 20, 2018; once a formal comment letter is received, the Frost Street Parties will prepare a response and/or revised proposal, as needed.
- Quantitative sampling of the SVE system granular activated carbon influent and effluent air flow was conducted on August 23, 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 [43,988 µg/m³]) continue to indicate significant mass extraction.

Frost Street Sites Effluent Compliance			
System Flow Rate =		800 ft ³ /m	
Compound	Annual Mass Emission Limit (lbs/year)	Carbon Exchange Required Indicator Concentration (µg/m ³) ²	August 2019 Effluent Concentration (µg/m ³)
Trichloroethene	500	19,000	0.22
Tetrachloroethene	1,000	38,000	3.73
Vinyl Chloride	100	3,800	ND
Cis-1,2-Dichloroethene ¹	100	3,800	131

Notes:

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

- 1 Cis-1,2-dichloroethene is not a listed HTAC, so the default is 100 lbs/year.
- 2 These limits were calculated based on Frost Street-specific system operations (i.e., flow rate) in order to remain below the annual HTAC emissions listed in Part 212-2.2 Table 2. Remaining below these concentrations ensures that annual emissions will not exceed the limit which demonstrates compliance with Part 212 without having to perform compound-specific analyses.

Groundwater Extraction/Hydraulic Containment System Installation (OU2)

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 August 2019 except for the following times:

- August 15, ~10:00 a.m. through August 19, ~5:00 p.m. – EX-1A down due to power outage
- August 19, ~5:00 pm through August 20, ~8:45 a.m. – all pumps down due to power outage
- August 29, at an unknown time through September 5, ~12:45 pm – system down and without power due to someone flipping the system electrical service emergency switch from on to off.

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 second quarter 2019 groundwater sampling event, which sampled all active Frost Street Sites' wells, was completed from June 17 to June 24, 2019. The data was submitted to NYSDEC via electronic data deliverable on July 29, 2019; the report will be submitted once complete.

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

Sincerely,

EnSafe, Inc., by



Alexandra Stark, P.E.

Attachments

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Appendix A
SVE/AS System O&M Logs

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

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

Date: 1-Aug
Weather / Temp: Sunny / 85 DEG
Technician / Operator: JW

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

System Status									
	Arrival		Departure			Arrival		Departure	
SVE Blower 1 (ON/OFF)	OFF		OFF		Sensaphone (ON/OFF)	ON		ON	
SVE Blower 2 (ON/OFF)	ON		ON		Surge Protection (ON/OFF)	ON		ON	
AS Compressor 1 (ON/OFF)	OFF		OFF		Lightning Protection (White/Black)	White		White	
AS Compressor 2 (ON/OFF)	ON		ON						
Soil Vapor Extraction System									
Blower Air Velocity/Flow Rate (fpm)/cfm)	4400		864		Blower 1 Total Runtime (hrs)	55,603.2			
Blower 1 Fresh Air Valve Open (%)	0				Blower 2 Total Runtime (hrs)	53,811.6			
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)	4.8			
VGAC-1 Effluent Vacuum ("H2O)	35				VGAC-1 Effluent PID (ppm)	0.0			
VGAC-2 Influent Vacuum ("H2O)	30				VGAC-2 Influent PID (ppm)	4.8			
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)	30	3600	79	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	40	3800	83		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	30	2600	57	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	30	3800	83		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	30	5500	120	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	30	3500	76		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	30	2700	59	
Air Sparge System									
Compressor 1 Pressure (psi)	Off for repairs				Compressor 2 Pressure (psi)	89			
Compressor 1 Temperature (degF)	Off for repairs				Compressor 2 Temperature (degF)	194			
Compressor 1 Runtime (hrs)	27,317				Compressor 2 Runtime (hrs)	33,712			
Manifold Regulator Pressure (psi)	87								
AS Manifold Legs - Pressure/Flow Rate									
	Pressure		Flow Rate			Pressure		Flow Rate	
AS-1 (psi)/(cfm)	15		10		AS-11 (psi)/(cfm)	15		4	
AS-2 (psi)/(cfm)	15		6		AS-12B (psi)/(cfm)	15		8	
AS-3 (psi)/(cfm)	14		6		AS-13B (psi)/(cfm)	15		8	
AS-4 (psi)/(cfm)	0		10		AS-14 (psi)/(cfm)	17		10	
AS-5 (psi)/(cfm)	16		7		AS-15 (psi)/(cfm)	14		8	
AS-6 (psi)/(cfm)	16		8		AS-16B (psi)/(cfm)	15		10	
AS-7 (psi)/(cfm)	16		5		AS-17 (psi)/(cfm)	16		5	
AS-8 (psi)/(cfm)	15		10		AS-18 (psi)/(cfm)	16		7	
AS-9 (psi)/(cfm)	15		7		AS-19 (psi)/(cfm)	14		4	
AS-10B (psi)/(cfm)	15		10						

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: 8-Aug
Weather / Temp: Sunny / 82 DEG
Technician / Operator: JW

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

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)	4400	864	Blower 1 Total Runtime (hrs)	55,691.2					
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	53,895.7					
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)	4.0					
VGAC-1 Effluent Vacuum ("H2O)	35		VGAC-1 Effluent PID (ppm)	0.0					
VGAC-2 Influent Vacuum ("H2O)	30		VGAC-2 Influent PID (ppm)	4.0					
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)	39	6000	131		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	30	3600	79	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	40	3800	83		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	30	2700	59	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	30	3800	83		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	30	5500	120	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	30	3500	76		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	30	2700	59	
Air Sparge System									
Compressor 1 Pressure (psi)	Off for repairs				Compressor 2 Pressure (psi)	98			
Compressor 1 Temperature (degF)	Off for repairs				Compressor 2 Temperature (degF)	203			
Compressor 1 Runtime (hrs)	27,317				Compressor 2 Runtime (hrs)	33,884			
Manifold Regulator Pressure (psi)	89								
AS Manifold Legs - Pressure/Flow Rate									
	Pressure		Flow Rate			Pressure		Flow Rate	
AS-1 (psi)/(cfm)	15		10		AS-11 (psi)/(cfm)	15		4	
AS-2 (psi)/(cfm)	15		6		AS-12B (psi)/(cfm)	15		8	
AS-3 (psi)/(cfm)	15		6		AS-13B (psi)/(cfm)	15		8	
AS-4 (psi)/(cfm)					AS-14 (psi)/(cfm)	17		10	
AS-5 (psi)/(cfm)	16		7		AS-15 (psi)/(cfm)	14		8	
AS-6 (psi)/(cfm)	16		8		AS-16B (psi)/(cfm)	15		10	
AS-7 (psi)/(cfm)	16		5		AS-17 (psi)/(cfm)	16		5	
AS-8 (psi)/(cfm)	15		10		AS-18 (psi)/(cfm)	16		7	
AS-9 (psi)/(cfm)	15		8		AS-19 (psi)/(cfm)	15		4	
AS-10B (psi)/(cfm)	15		10						

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: 16-Aug
Weather / Temp: Cloudy / 75 DEG
Technician / Operator: JW

Arrival Time: 9:30
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)	4400	864		Blower 1 Total Runtime (hrs)	55,786.4				
Blower 1 Fresh Air Valve Open (%)	0			Blower 2 Total Runtime (hrs)	53,987.8				
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)	4.0				
VGAC-1 Effluent Vacuum ("H2O)	35			VGAC-1 Effluent PID (ppm)	0.0				
VGAC-2 Influent Vacuum ("H2O)	30			VGAC-2 Influent PID (ppm)	4.0				
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	5000	109		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	30	3700	81	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	40	3000	65		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	30	2600	57	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	30	4200	92		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	30	5200	113	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	28	3700	81		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	30	3200	70	
Air Sparge System									
Compressor 1 Pressure (psi)	Off for repairs			Compressor 2 Pressure (psi)	81				
Compressor 1 Temperature (degF)	Off for repairs			Compressor 2 Temperature (degF)	193				
Compressor 1 Runtime (hrs)	27,317			Compressor 2 Runtime (hrs)	34,072				
Manifold Regulator Pressure (psi)	80								
AS Manifold Legs - Pressure/Flow Rate									
	Pressure	Flow Rate			Pressure	Flow Rate			
AS-1 (psi)/(cfm)	15	10		AS-11 (psi)/(cfm)	15	4			
AS-2 (psi)/(cfm)	15	6		AS-12B (psi)/(cfm)	15	8			
AS-3 (psi)/(cfm)	15	4		AS-13B (psi)/(cfm)	15	8			
AS-4 (psi)/(cfm)				AS-14 (psi)/(cfm)	15	9			
AS-5 (psi)/(cfm)	16	5		AS-15 (psi)/(cfm)	15	7			
AS-6 (psi)/(cfm)	15	6		AS-16B (psi)/(cfm)	15	9			
AS-7 (psi)/(cfm)	16	4		AS-17 (psi)/(cfm)	15	4			
AS-8 (psi)/(cfm)	16	7		AS-18 (psi)/(cfm)	15	5			
AS-9 (psi)/(cfm)	16	8		AS-19 (psi)/(cfm)	15	4			
AS-10B (psi)/(cfm)	15	10							

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-Aug
Weather / Temp: Cloudy / 75 DEG
Technician / Operator: JW

Arrival Time: 8:45
Departure Time: 9:30

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)	55,872.2					
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	54,072.1					
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)	4.6					
VGAC-1 Effluent Vacuum ("H2O)	35		VGAC-1 Effluent PID (ppm)	0.0					
VGAC-2 Influent Vacuum ("H2O)	30		VGAC-2 Influent PID (ppm)	4.6					
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	5100	111	0.0	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	30	3700	81	2.1
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	40	3000	65	5.0	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	30	2600	57	0.0
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	30	4200	92	3.2	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	32	5000	109	10.4
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	30	3700	81	0.0	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	30	3200	70	1.4
Air Sparge System									
Compressor 1 Pressure (psi)	Off for repairs			Compressor 2 Pressure (psi)	81				
Compressor 1 Temperature (degF)	Off for repairs			Compressor 2 Temperature (degF)	193				
Compressor 1 Runtime (hrs)	27,317			Compressor 2 Runtime (hrs)	34,242				
Manifold Regulator Pressure (psi)	80								
AS Manifold Legs - Pressure/Flow Rate									
	Pressure	Flow Rate		Pressure	Flow Rate				
AS-1 (psi)/(cfm)	15	10	AS-11 (psi)/(cfm)	15	4				
AS-2 (psi)/(cfm)	15	7	AS-12B (psi)/(cfm)	15	8				
AS-3 (psi)/(cfm)	15	4	AS-13B (psi)/(cfm)	15	8				
AS-4 (psi)/(cfm)			AS-14 (psi)/(cfm)	15	9				
AS-5 (psi)/(cfm)	16	5	AS-15 (psi)/(cfm)	15	7				
AS-6 (psi)/(cfm)	15	5	AS-16B (psi)/(cfm)	15	9				
AS-7 (psi)/(cfm)	15	5	AS-17 (psi)/(cfm)	15	4				
AS-8 (psi)/(cfm)	16	7	AS-18 (psi)/(cfm)	15	5				
AS-9 (psi)/(cfm)	16	8	AS-19 (psi)/(cfm)	15	4				
AS-10B (psi)/(cfm)	15	10							

Notes, Comments & Observations:

AS-4 pipe cracked on manifold, shut off.

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: 27-Aug
Weather / Temp: Cloudy / 75 DEG
Technician / Operator: JW

Arrival Time: 12:45
Departure Time: 13:30

System Status									
	Arrival	Departure			Arrival	Departure			
SVE Blower 1 (ON/OFF)	OFF	OFF		Sensaphone (ON/OFF)	ON	ON			
SVE Blower 2 (ON/OFF)	ON	ON		Surge Protection (ON/OFF)	ON	ON			
AS Compressor 1 (ON/OFF)	OFF	OFF		Lightning Protection (White/Black)	White	White			
AS Compressor 2 (ON/OFF)	ON	ON							
Soil Vapor Extraction System									
Blower Air Velocity/Flow Rate (fpm)/cfm)	4500	884		Blower 1 Total Runtime (hrs)	55,921.2				
Blower 1 Fresh Air Valve Open (%)	0			Blower 2 Total Runtime (hrs)	54,120.3				
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)	5.0				
VGAC-1 Effluent Vacuum ("H2O)	35			VGAC-1 Effluent PID (ppm)	0.0				
VGAC-2 Influent Vacuum ("H2O)	30			VGAC-2 Influent PID (ppm)	5.0				
VGAC-2 Effluent Vacuum ("H2O)	35			VGAC-2 Effluent PID (ppm)	0.0				
VGAC-3 Influent Vacuum ("H2O)	41			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	5100	111		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	30	3700	81	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	40	3000	65		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	30	2600	57	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	30	4200	92		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	32	5000	109	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	30	3700	81		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	30	3200	70	
Air Sparge System									
Compressor 1 Pressure (psi)	Off for repairs			Compressor 2 Pressure (psi)	88				
Compressor 1 Temperature (degF)	Off for repairs			Compressor 2 Temperature (degF)	200				
Compressor 1 Runtime (hrs)	27,317			Compressor 2 Runtime (hrs)	34,339				
Manifold Regulator Pressure (psi)	88								
AS Manifold Legs - Pressure/Flow Rate									
	Pressure	Flow Rate			Pressure	Flow Rate			
AS-1 (psi)/(cfm)	15	10		AS-11 (psi)/(cfm)	16	5			
AS-2 (psi)/(cfm)	15	7		AS-12B (psi)/(cfm)	15	8			
AS-3 (psi)/(cfm)	16	4		AS-13B (psi)/(cfm)	15	8			
AS-4 (psi)/(cfm)				AS-14 (psi)/(cfm)	15	10			
AS-5 (psi)/(cfm)	16	5		AS-15 (psi)/(cfm)	15	8			
AS-6 (psi)/(cfm)	15	5		AS-16B (psi)/(cfm)	15	10			
AS-7 (psi)/(cfm)	15	5		AS-17 (psi)/(cfm)	16	4			
AS-8 (psi)/(cfm)	16	8		AS-18 (psi)/(cfm)	15	5			
AS-9 (psi)/(cfm)	16	8		AS-19 (psi)/(cfm)	16	4			
AS-10B (psi)/(cfm)	15	10							

Notes, Comments & Observations:

AS-4 pipe cracked on manifold, shut off.

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



Friday, August 30, 2019

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

Project ID: ENSAFE- WESTBURY
SDG ID: GCD93119
Sample ID#s: CD93119 - CD93120

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

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

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

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

Sincerely yours,

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

Phyllis/Shiller

Laboratory Director

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

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



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



Sample Id Cross Reference

August 30, 2019

SDG I.D.: GCD93119

Project ID: ENSAFE- WESTBURY

Client Id	Lab Id	Matrix
SVE INFLUENT	CD93119	AIR
SVE EFFLUENT	CD93120	AIR



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Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

August 30, 2019

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

Sample Information

Matrix: AIR
Location Code: ENVIOTR
Rush Request: Standard
P.O.#:
Canister Id: 756

Custody Information

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

Date

08/23/19

Time

15:16

Laboratory Data

SDG ID: GCD93119
Phoenix ID: CD93119

Project ID: ENSAFE- WESTBURY
Client ID: SVE INFLUENT

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<u>Volatiles (TO15)</u>							
1,1,1,2-Tetrachloroethane	ND	0.729	ND	5.00	08/28/19	KCA	5
1,1,1-Trichloroethane	ND	0.917	ND	5.00	08/28/19	KCA	5
1,1,2,2-Tetrachloroethane	ND	0.729	ND	5.00	08/28/19	KCA	5
1,1,2-Trichloroethane	ND	0.917	ND	5.00	08/28/19	KCA	5
1,1-Dichloroethane	ND	1.24	ND	5.02	08/28/19	KCA	5
1,1-Dichloroethene	ND	0.252	ND	1.00	08/28/19	KCA	5
1,2,4-Trichlorobenzene	ND	0.674	ND	5.00	08/28/19	KCA	5
1,2,4-Trimethylbenzene	ND	1.02	ND	5.01	08/28/19	KCA	5
1,2-Dibromoethane(EDB)	ND	0.651	ND	5.00	08/28/19	KCA	5
1,2-Dichlorobenzene	ND	0.832	ND	5.00	08/28/19	KCA	5
1,2-Dichloroethane	ND	1.24	ND	5.02	08/28/19	KCA	5
1,2-dichloropropane	ND	1.08	ND	4.99	08/28/19	KCA	5
1,2-Dichlorotetrafluoroethane	ND	0.716	ND	5.00	08/28/19	KCA	5
1,3,5-Trimethylbenzene	ND	1.02	ND	5.01	08/28/19	KCA	5
1,3-Butadiene	ND	2.26	ND	5.00	08/28/19	KCA	5
1,3-Dichlorobenzene	ND	0.832	ND	5.00	08/28/19	KCA	5
1,4-Dichlorobenzene	ND	0.832	ND	5.00	08/28/19	KCA	5
1,4-Dioxane	ND	1.39	ND	5.01	08/28/19	KCA	5
2-Hexanone(MBK)	ND	1.22	ND	4.99	08/28/19	KCA	5
4-Ethyltoluene	ND	1.02	ND	5.01	08/28/19	KCA	5
4-Isopropyltoluene	ND	0.911	ND	5.00	08/28/19	KCA	5
4-Methyl-2-pentanone(MIBK)	ND	1.22	ND	4.99	08/28/19	KCA	5
Acetone	4.28	2.11	10.2	5.01	08/28/19	KCA	5
Acrylonitrile	ND	2.31	ND	5.01	08/28/19	KCA	5
Benzene	ND	1.57	ND	5.01	08/28/19	KCA	5
Benzyl chloride	ND	0.966	ND	5.00	08/28/19	KCA	5

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND	0.747	ND	5.00	08/28/19	KCA	5	
Bromoform	ND	0.484	ND	5.00	08/28/19	KCA	5	
Bromomethane	ND	1.29	ND	5.01	08/28/19	KCA	5	
Carbon Disulfide	ND	1.61	ND	5.01	08/28/19	KCA	5	
Carbon Tetrachloride	ND	0.159	ND	1.00	08/28/19	KCA	5	
Chlorobenzene	ND	1.09	ND	5.01	08/28/19	KCA	5	
Chloroethane	ND	1.90	ND	5.01	08/28/19	KCA	5	
Chloroform	ND	1.02	ND	4.98	08/28/19	KCA	5	
Chloromethane	ND	2.42	ND	4.99	08/28/19	KCA	5	
Cis-1,2-Dichloroethene	161	0.252	638	1.00	08/28/19	KCA	5	
cis-1,3-Dichloropropene	ND	1.10	ND	4.99	08/28/19	KCA	5	
Cyclohexane	ND	1.45	ND	4.99	08/28/19	KCA	5	
Dibromochloromethane	ND	0.587	ND	5.00	08/28/19	KCA	5	
Dichlorodifluoromethane	ND	1.01	ND	4.99	08/28/19	KCA	5	
Ethanol	3.28	2.66	6.18	5.01	08/28/19	KCA	5	1
Ethyl acetate	ND	1.39	ND	5.01	08/28/19	KCA	5	1
Ethylbenzene	ND	1.15	ND	4.99	08/28/19	KCA	5	
Heptane	ND	1.22	ND	5.00	08/28/19	KCA	5	
Hexachlorobutadiene	ND	0.469	ND	5.00	08/28/19	KCA	5	
Hexane	ND	1.42	ND	5.00	08/28/19	KCA	5	
Isopropylalcohol	3.08	2.04	7.57	5.01	08/28/19	KCA	5	
Isopropylbenzene	ND	1.02	ND	5.01	08/28/19	KCA	5	
m,p-Xylene	ND	1.15	ND	4.99	08/28/19	KCA	5	
Methyl Ethyl Ketone	ND	1.70	ND	5.01	08/28/19	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	1.39	ND	5.01	08/28/19	KCA	5	
Methylene Chloride	ND	4.32	ND	15.0	08/28/19	KCA	5	
n-Butylbenzene	ND	0.911	ND	5.00	08/28/19	KCA	5	1
o-Xylene	ND	1.15	ND	4.99	08/28/19	KCA	5	
Propylene	ND	2.91	ND	5.01	08/28/19	KCA	5	1
sec-Butylbenzene	ND	0.911	ND	5.00	08/28/19	KCA	5	1
Styrene	ND	1.17	ND	4.98	08/28/19	KCA	5	
Tetrachloroethene	6120	55.3	41500	375	08/28/19	KCA	1500	
Tetrahydrofuran	ND	1.70	ND	5.01	08/28/19	KCA	5	1
Toluene	ND	1.33	ND	5.01	08/28/19	KCA	5	
Trans-1,2-Dichloroethene	2.03	1.26	8.04	4.99	08/28/19	KCA	5	
trans-1,3-Dichloropropene	ND	1.10	ND	4.99	08/28/19	KCA	5	
Trichloroethene	344	55.9	1850	300	08/28/19	KCA	1500	
Trichlorofluoromethane	ND	0.891	ND	5.00	08/28/19	KCA	5	
Trichlorotrifluoroethane	ND	0.653	ND	5.00	08/28/19	KCA	5	
Vinyl Chloride	ND	0.391	ND	1.00	08/28/19	KCA	5	
<u>QA/QC Surrogates/Internals</u>								
% Bromofluorobenzene (5x)	109	%	109	%	08/28/19	KCA	5	
% IS-1,4-Difluorobenzene (5x)	66	%	66	%	08/28/19	KCA	5	
% IS-Bromochloromethane (5x)	78	%	78	%	08/28/19	KCA	5	
% IS-Chlorobenzene-d5 (5x)	87	%	87	%	08/28/19	KCA	5	
% Bromofluorobenzene (1500x)	99	%	99	%	08/28/19	KCA	1500	
% IS-1,4-Difluorobenzene (1500x)	114	%	114	%	08/28/19	KCA	1500	
% IS-Bromochloromethane (1500x)	118	%	118	%	08/28/19	KCA	1500	
% IS-Chlorobenzene-d5 (1500x)	100	%	100	%	08/28/19	KCA	1500	

Client ID: SVE INFLUENT

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

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

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

Comments:

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



Analysis Report

August 30, 2019

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

Sample Information

Matrix: AIR
Location Code: ENVIOTR
Rush Request: Standard
P.O.#:
Canister Id: 757

Custody Information

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

Date

08/23/19
08/27/19

Time

9:01
15:16

Laboratory Data

SDG ID: GCD93119
Phoenix ID: CD93120

Project ID: ENSAFE- WESTBURY
Client ID: SVE EFFLUENT

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<u>Volatiles (TO15)</u>							
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	08/28/19	KCA	1
1,1,1-Trichloroethane	ND	0.183	ND	1.00	08/28/19	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	08/28/19	KCA	1
1,1,2-Trichloroethane	ND	0.183	ND	1.00	08/28/19	KCA	1
1,1-Dichloroethane	ND	0.247	ND	1.00	08/28/19	KCA	1
1,1-Dichloroethene	ND	0.051	ND	0.20	08/28/19	KCA	1
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	08/28/19	KCA	1
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	08/28/19	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	08/28/19	KCA	1
1,2-Dichlorobenzene	ND	0.166	ND	1.00	08/28/19	KCA	1
1,2-Dichloroethane	ND	0.247	ND	1.00	08/28/19	KCA	1
1,2-dichloropropane	ND	0.217	ND	1.00	08/28/19	KCA	1
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	08/28/19	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	08/28/19	KCA	1
1,3-Butadiene	ND	0.452	ND	1.00	08/28/19	KCA	1
1,3-Dichlorobenzene	ND	0.166	ND	1.00	08/28/19	KCA	1
1,4-Dichlorobenzene	ND	0.166	ND	1.00	08/28/19	KCA	1
1,4-Dioxane	ND	0.278	ND	1.00	08/28/19	KCA	1
2-Hexanone(MBK)	ND	0.244	ND	1.00	08/28/19	KCA	1
4-Ethyltoluene	ND	0.204	ND	1.00	08/28/19	KCA	1
4-Isopropyltoluene	ND	0.182	ND	1.00	08/28/19	KCA	1
4-Methyl-2-pentanone(MIBK)	ND	0.244	ND	1.00	08/28/19	KCA	1
Acetone	1.75	0.421	4.15	1.00	08/28/19	KCA	1
Acrylonitrile	ND	0.461	ND	1.00	08/28/19	KCA	1
Benzene	ND	0.313	ND	1.00	08/28/19	KCA	1
Benzyl chloride	ND	0.193	ND	1.00	08/28/19	KCA	1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	ND	1.00	08/28/19	KCA	1
Bromoform	ND	0.097	ND	1.00	08/28/19	KCA	1
Bromomethane	ND	0.258	ND	1.00	08/28/19	KCA	1
Carbon Disulfide	0.562	0.321	1.75	1.00	08/28/19	KCA	1
Carbon Tetrachloride	ND	0.032	ND	0.20	08/28/19	KCA	1
Chlorobenzene	ND	0.217	ND	1.00	08/28/19	KCA	1
Chloroethane	ND	0.379	ND	1.00	08/28/19	KCA	1
Chloroform	ND	0.205	ND	1.00	08/28/19	KCA	1
Chloromethane	ND	0.485	ND	1.00	08/28/19	KCA	1
Cis-1,2-Dichloroethene	33.0	0.051	131	0.20	08/28/19	KCA	1
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	08/28/19	KCA	1
Cyclohexane	ND	0.291	ND	1.00	08/28/19	KCA	1
Dibromochloromethane	ND	0.118	ND	1.00	08/28/19	KCA	1
Dichlorodifluoromethane	0.566	0.202	2.80	1.00	08/28/19	KCA	1
Ethanol	2.50	0.531	4.71	1.00	08/28/19	KCA	1
Ethyl acetate	ND	0.278	ND	1.00	08/28/19	KCA	1
Ethylbenzene	ND	0.230	ND	1.00	08/28/19	KCA	1
Heptane	ND	0.244	ND	1.00	08/28/19	KCA	1
Hexachlorobutadiene	ND	0.094	ND	1.00	08/28/19	KCA	1
Hexane	ND	0.284	ND	1.00	08/28/19	KCA	1
Isopropylalcohol	0.477	0.407	1.17	1.00	08/28/19	KCA	1
Isopropylbenzene	ND	0.204	ND	1.00	08/28/19	KCA	1
m,p-Xylene	ND	0.230	ND	1.00	08/28/19	KCA	1
Methyl Ethyl Ketone	ND	0.339	ND	1.00	08/28/19	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	08/28/19	KCA	1
Methylene Chloride	ND	0.864	ND	3.00	08/28/19	KCA	1
n-Butylbenzene	ND	0.182	ND	1.00	08/28/19	KCA	1
o-Xylene	ND	0.230	ND	1.00	08/28/19	KCA	1
Propylene	ND	0.581	ND	1.00	08/28/19	KCA	1
sec-Butylbenzene	ND	0.182	ND	1.00	08/28/19	KCA	1
Styrene	ND	0.235	ND	1.00	08/28/19	KCA	1
Tetrachloroethene	0.550	0.037	3.73	0.25	08/28/19	KCA	1
Tetrahydrofuran	ND	0.339	ND	1.00	08/28/19	KCA	1
Toluene	ND	0.266	ND	1.00	08/28/19	KCA	1
Trans-1,2-Dichloroethene	0.602	0.252	2.39	1.00	08/28/19	KCA	1
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	08/28/19	KCA	1
Trichloroethene	0.041	0.037	0.22	0.20	08/28/19	KCA	1
Trichlorofluoromethane	ND	0.178	ND	1.00	08/28/19	KCA	1
Trichlorotrifluoroethane	ND	0.131	ND	1.00	08/28/19	KCA	1
Vinyl Chloride	ND	0.078	ND	0.20	08/28/19	KCA	1
<u>QA/QC Surrogates/Internals</u>							
% Bromofluorobenzene	96	%	96	%	08/28/19	KCA	1
% IS-1,4-Difluorobenzene	91	%	91	%	08/28/19	KCA	1
% IS-Bromochloromethane	83	%	83	%	08/28/19	KCA	1
% IS-Chlorobenzene-d5	95	%	95	%	08/28/19	KCA	1

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

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

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

Comments:

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Phyllis Shiller, Laboratory Director

August 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



QA/QC Report

August 30, 2019

QA/QC Data

SDG I.D.: GCD93119

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 494350 (ppbv), QC Sample No: CD92264 (CD93119 (5X) , CD93120)												
<u>Volatiles</u>												
1,1,1,2-Tetrachloroethane	ND	0.500	ND	3.43	91	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.500	ND	2.73	95	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.020	ND	0.14	93	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.020	ND	0.11	96	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.150	ND	0.61	102	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.200	ND	0.79	94	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.054	ND	0.40	132	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.500	ND	2.46	117	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.020	ND	0.15	104	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.100	ND	0.60	117	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.020	ND	0.08	100	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.020	ND	0.09	105	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.500	ND	3.49	92	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.500	ND	2.46	113	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.500	ND	1.11	95	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.100	ND	0.60	102	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.080	ND	0.48	114	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.130	ND	0.47	112	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.500	ND	2.05	104	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.500	ND	2.46	106	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.500	ND	2.74	122	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.500	ND	2.05	100	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.750	ND	1.78	84	7.74	7.83	3.26	3.30	NC	70 - 130	25
Acrylonitrile	ND	0.500	ND	1.08	97	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.200	ND	0.64	101	ND	ND	ND	ND	NC	70 - 130	25
Benzyl chloride	ND	0.500	ND	2.59	134	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.020	ND	0.13	105	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.150	ND	1.55	105	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.140	ND	0.54	94	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.500	ND	1.56	95	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.086	ND	0.54	101	ND	ND	ND	ND	NC	70 - 130	25
Chlorobenzene	ND	0.200	ND	0.92	101	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	0.200	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25
Chloromethane	ND	0.500	ND	1.03	90	1.47	1.44	0.711	0.696	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.256	ND	1.01	112	ND	ND	ND	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.500	ND	1.72	112	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.020	ND	0.17	102	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.500	ND	2.47	102	ND	ND	ND	ND	NC	70 - 130	25
Ethanol	ND	0.750	ND	1.41	94	6.20	6.03	3.29	3.20	NC	70 - 130	25

QA/QC Data

SDG I.D.: GCD93119

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	104	ND	ND	ND	ND	NC	70 - 130	25
Ethylbenzene	ND	0.500	ND	2.17	101	ND	ND	ND	ND	NC	70 - 130	25
Heptane	ND	0.500	ND	2.05	104	ND	ND	ND	ND	NC	70 - 130	25
Hexachlorobutadiene	ND	0.020	ND	0.21	104	ND	ND	ND	ND	NC	70 - 130	25
Hexane	ND	0.450	ND	1.59	117	ND	ND	ND	ND	NC	70 - 130	25
Isopropylalcohol	ND	0.750	ND	1.84	89	ND	ND	ND	ND	NC	70 - 130	25
Isopropylbenzene	ND	0.500	ND	2.46	120	ND	ND	ND	ND	NC	70 - 130	25
m,p-Xylene	ND	1.00	ND	4.34	113	ND	ND	ND	ND	NC	70 - 130	25
Methyl Ethyl Ketone	ND	0.450	ND	1.33	109	ND	ND	ND	ND	NC	70 - 130	25
Methyl tert-butyl ether(MTBE)	ND	0.500	ND	1.80	102	ND	ND	ND	ND	NC	70 - 130	25
Methylene Chloride	ND	3.00	ND	10.4	94	ND	ND	ND	ND	NC	70 - 130	25
n-Butylbenzene	ND	0.500	ND	2.74	120	ND	ND	ND	ND	NC	70 - 130	25
o-Xylene	ND	0.500	ND	2.17	121	ND	ND	ND	ND	NC	70 - 130	25
Propylene	ND	0.500	ND	0.86	109	ND	ND	ND	ND	NC	70 - 130	25
sec-Butylbenzene	ND	0.500	ND	2.74	111	ND	ND	ND	ND	NC	70 - 130	25
Styrene	ND	0.200	ND	0.85	111	ND	ND	ND	ND	NC	70 - 130	25
Tetrachloroethene	ND	0.100	ND	0.68	106	ND	ND	ND	ND	NC	70 - 130	25
Tetrahydrofuran	ND	0.500	ND	1.47	99	ND	ND	ND	ND	NC	70 - 130	25
Toluene	ND	0.500	ND	1.88	117	ND	ND	ND	ND	NC	70 - 130	25
Trans-1,2-Dichloroethene	ND	0.200	ND	0.79	98	ND	ND	ND	ND	NC	70 - 130	25
trans-1,3-Dichloropropene	ND	0.500	ND	2.27	102	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.050	ND	0.27	110	ND	ND	ND	ND	NC	70 - 130	25
Trichlorofluoromethane	ND	0.500	ND	2.81	87	ND	ND	ND	ND	NC	70 - 130	25
Trichlorotrifluoroethane	ND	0.500	ND	3.83	92	ND	ND	ND	ND	NC	70 - 130	25
Vinyl Chloride	ND	0.100	ND	0.26	87	ND	ND	ND	ND	NC	70 - 130	25
% Bromofluorobenzene	93	%	93	%	101	99	97	99	97	NC	70 - 130	25
% IS-1,4-Difluorobenzene	115	%	115	%	80	105	104	105	104	NC	60 - 140	25
% IS-Bromochloromethane	121	%	121	%	74	108	107	108	107	NC	60 - 140	25
% IS-Chlorobenzene-d5	112	%	112	%	83	107	104	107	104	NC	60 - 140	25

QA/QC Batch 494523 (ppbv), QC Sample No: CD93469 (CD93119 (1500X))

Volatiles

Tetrachloroethene	ND	0.200	ND	1.36	102	173	172	25.5	25.4	0.4	70 - 130	25
Trichloroethene	ND	0.200	ND	1.07	102	129	131	24.1	24.3	0.8	70 - 130	25
% Bromofluorobenzene	94	%	94	%	101	103	104	103	104	NC	70 - 130	25
% IS-1,4-Difluorobenzene	115	%	115	%	82	74	76	74	76	NC	60 - 140	25
% IS-Bromochloromethane	119	%	119	%	76	93	94	93	94	NC	60 - 140	25
% IS-Chlorobenzene-d5	110	%	110	%	86	95	95	95	95	NC	60 - 140	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
August 30, 2019

Friday, August 30, 2019

Criteria: None

State: NJ

Sample Criteria Exceedances Report
GCD93119 - ENVIROTR

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

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



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Analysis Comments

August 30, 2019

SDG I.D.: GCD93119

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

AIRSIM

CHEM24 08/27/19-1: CD93119, CD93120

The following Continuing Calibration compounds did not meet % deviation criteria: Ethanol 31%H (30%)

The following Continuing Calibration compounds did not meet Maximum % deviation criteria: Ethanol 31%H (30%)

