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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

March 10, 2017

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

Re: Progress Report: February 2017
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 the Progress Report for the Frost Street Sites (Site ID #s 1-30043 I, L, M) for work completed in February 2017.

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

- 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**).
- Quantitative sampling of the SVE system granular activated carbon influent and effluent air flow was conducted after the carbon exchange, on February 23, 2017, 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. Photoionization detector readings between the lead and lag activated carbon media vessels and in the effluent air stream exhibit 0.0 parts per million total volatile organic compounds.
 - Effluent concentrations are well below the allowable limits, as shown in the table below.

Frost Street Sites Effluent Compliance			
System Flow Rate =		800	ft ³ /m
Compound	Annual Mass Emission Limit (lbs/year)	Allowable Continuous Annual Concentration (µg/m ³)	February 2017 Effluent Concentration (µg/m ³)
Trichloroethene	500	19,000	1.36
Tetrachloroethene	1,000	38,000	2.11
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 February 8, 2017, 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**.

Quarterly/Annual Groundwater Monitoring

- The fourth quarter 2016 ("annual/fifth quarter") groundwater sampling event was completed during the week of December 5, 2016. The samples are being analyzed and will be validated by a third party data validator. Results will be included 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.

Sincerely,

EnSafe, Inc., by

Alexandra M. J. Stark

Alexandra Stark, P.E.

Copies: A. Tamuno, Esq., NYSDEC	<i>Via email to amtamuno@gw.dec.state.ny.us</i>
G. Bobersky, NYSDEC	<i>Via email to gtbobers@gw.dec.state.ny.us</i>
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J. DeFranco, NCDOH	<i>Via email to jdefranco@nassaucountyny.gov</i>
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K. Maldonado, Esq.	<i>Via email to kevinmaldonado64@yahoo.com</i>
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J. LaPoma, U.S. EPA	<i>Via email to lapoma.jennifer@epa.gov</i>
J. Heaney, Walden Associates	<i>Via email to jheaney@walden-associates.com</i>
P. Coop, EnSafe	<i>Via email to pcoop@ensafe.com</i>
J. Wilkinson, Envirotrac	<i>Via email to jamesw@envirotrac.com</i>

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: 8-Feb
Weather / Temp: Rain / 30 DEG
Technician / Operator: DW

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

System Status									
	Arrival	Departure		Arrival	Departure				
SVE Blower 1 (ON/OFF)	OFF	OFF	Sensaphone (ON/OFF)	ON	ON				
SVE Blower 2 (ON/OFF)	ON	ON	Surge Protection (ON/OFF)	ON	ON				
AS Compressor 1 (ON/OFF)	OFF	OFF	Lightning Protection (White/Black)	White	White				
AS Compressor 2 (ON/OFF)	ON	ON							
Soil Vapor Extraction System									
Blower Air Velocity/Flow Rate (fpm)/cfm)	4000	785	Blower 1 Total Runtime (hrs)	45,501.0					
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	46,166.0					
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)	68		VGAC-1 Influent PID (ppm)	6.1					
VGAC-1 Effluent Vacuum ("H2O)	60		VGAC-1 Effluent PID (ppm)	0.0					
VGAC-2 Influent Vacuum ("H2O)	56		VGAC-2 Influent PID (ppm)	6.1					
VGAC-2 Effluent Vacuum ("H2O)	56		VGAC-2 Effluent PID (ppm)	0.0					
VGAC-3 Influent Pressure ("H2O)	5		VGAC-3 Influent PID (ppm)	0.0					
VGAC-3 Effluent Pressure ("H2O)	2.5		VGAC-3 Effluent PID (ppm)	0.0					
Blower Effluent Temp (DegF)	124		Blower Effluent PID (ppm)	0.0					
Blower Effluent Pressure ("H2O)	14								
Transfer Pump Total Runtime (hrs)	25,024.6		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)	44	7000	153		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	38	3600	79	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	46	4000	87		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	38	2700	59	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	36	4500	98		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	38	6000	131	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	38	3800	83		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	40	2650	58	
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)	226			
Compressor 1 Runtime (hrs)	27,317.0				Compressor 2 Runtime (hrs)	19,303.0			
Manifold Regulator Pressure (psi)	85								
AS Manifold Legs - Pressure/Flow Rate									
	Pressure		Flow Rate			Pressure		Flow Rate	
AS-1 (psi)/(cfm)	15		5		AS-11 (psi)/(cfm)	15		8	
AS-2 (psi)/(cfm)	15		5		AS-12B (psi)/(cfm)	15		6	
AS-3 (psi)/(cfm)	14		8		AS-13B (psi)/(cfm)	14		6	
AS-4 (psi)/(cfm)	13		4		AS-14 (psi)/(cfm)	15		6	
AS-5 (psi)/(cfm)	15		11		AS-15 (psi)/(cfm)	15		8	
AS-6 (psi)/(cfm)	15		6		AS-16B (psi)/(cfm)	15		6	
AS-7 (psi)/(cfm)	15		15		AS-17 (psi)/(cfm)	15		5	
AS-8 (psi)/(cfm)	15		11		AS-18 (psi)/(cfm)	15		8	
AS-9 (psi)/(cfm)	15		10		AS-19 (psi)/(cfm)	15		9	
AS-10B (psi)/(cfm)	15		8						

Notes, Comments & Observations:

Collected water sample and drained tank.

Operation & Maintenance Data Sheet
 Ensae-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: 15-Feb
 Weather / Temp: Clear / 45 DEG
 Technician / Operator: DW

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

System Status									
	Arrival	Departure		Arrival	Departure				
SVE Blower 1 (ON/OFF)	ON	ON	Sensaphone (ON/OFF)	ON	ON				
SVE Blower 2 (ON/OFF)	OFF	OFF	Surge Protection (ON/OFF)	ON	ON				
AS Compressor 1 (ON/OFF)	OFF	OFF	Lightning Protection (White/Black)	White	White				
AS Compressor 2 (ON/OFF)	ON	ON							
Soil Vapor Extraction System									
Blower Air Velocity/Flow Rate (fpm)/(cfm)	4000	785	Blower 1 Total Runtime (hrs)	45,587.9					
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	46,248.8					
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)	6.0					
VGAC-1 Effluent Vacuum ("H2O)	60		VGAC-1 Effluent PID (ppm)	0.0					
VGAC-2 Influent Vacuum ("H2O)	56		VGAC-2 Influent PID (ppm)	6.0					
VGAC-2 Effluent Vacuum ("H2O)	54		VGAC-2 Effluent PID (ppm)	0.0					
VGAC-3 Influent Pressure ("H2O)	5		VGAC-3 Influent PID (ppm)	0.0					
VGAC-3 Effluent Pressure ("H2O)	2.5		VGAC-3 Effluent PID (ppm)	0.0					
Blower Effluent Temp (DegF)	124		Blower Effluent PID (ppm)	0.0					
Blower Effluent Pressure ("H2O)	13.5								
Transfer Pump Total Runtime (hrs)	25,024.8		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)	44	7000	153		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	38	3600	79	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	46	4000	87		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	38	2700	59	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	40	4400	96		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	38	6000	131	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	38	3800	83		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	40	2700	59	
Air Sparge System									
Compressor 1 Pressure (psi)	Off for repairs			Compressor 2 Pressure (psi)	83				
Compressor 1 Temperature (degF)	Off for repairs			Compressor 2 Temperature (degF)	183				
Compressor 1 Runtime (hrs)	27,317.0			Compressor 2 Runtime (hrs)	19,303.0				
Manifold Regulator Pressure (psi)	85								
AS Manifold Legs - Pressure/Flow Rate									
	Pressure	Flow Rate		Pressure	Flow Rate				
AS-1 (psi)/(cfm)	17	5	AS-11 (psi)/(cfm)	15	8				
AS-2 (psi)/(cfm)	15	4	AS-12B (psi)/(cfm)	15	6				
AS-3 (psi)/(cfm)	15	9	AS-13B (psi)/(cfm)	15	6				
AS-4 (psi)/(cfm)	15	5	AS-14 (psi)/(cfm)	15	8				
AS-5 (psi)/(cfm)	16	11	AS-15 (psi)/(cfm)	15	8				
AS-6 (psi)/(cfm)	15	8	AS-16B (psi)/(cfm)	15	7				
AS-7 (psi)/(cfm)	15	9	AS-17 (psi)/(cfm)	15	4				
AS-8 (psi)/(cfm)	15	9	AS-18 (psi)/(cfm)	15	7				
AS-9 (psi)/(cfm)	15	12	AS-19 (psi)/(cfm)	15	9				
AS-10B (psi)/(cfm)	15	7							

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: 23-Feb
Weather / Temp: Clear / 50 DEG
Technician / Operator: DW

Arrival Time: 10:00
Departure Time: 12:30

System Status									
	Arrival	Departure		Arrival	Departure				
SVE Blower 1 (ON/OFF)	ON	ON	Sensaphone (ON/OFF)	ON	ON				
SVE Blower 2 (ON/OFF)	OFF	OFF	Surge Protection (ON/OFF)	ON	ON				
AS Compressor 1 (ON/OFF)	OFF	OFF	Lightning Protection (White/Black)	White	White				
AS Compressor 2 (ON/OFF)	ON	ON							
Soil Vapor Extraction System									
Blower Air Velocity/Flow Rate (fpm)/cfm)	4200	825	Blower 1 Total Runtime (hrs)	45,695.1					
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	46,332.5					
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0					
Moisture Separator Vacuum ("Hg)	3.5		Blower 2 Air Filter Differential Pressure ("H2O)	0					
VGAC-1 Influent Vacuum ("H2O)	72		VGAC-1 Influent PID (ppm)	6.0					
VGAC-1 Effluent Vacuum ("H2O)	64		VGAC-1 Effluent PID (ppm)	0.0					
VGAC-2 Influent Vacuum ("H2O)	64		VGAC-2 Influent PID (ppm)	6.0					
VGAC-2 Effluent Vacuum ("H2O)	64		VGAC-2 Effluent PID (ppm)	0.0					
VGAC-3 Influent Pressure ("H2O)	5		VGAC-3 Influent PID (ppm)	0.0					
VGAC-3 Effluent Pressure ("H2O)	2.5		VGAC-3 Effluent PID (ppm)	0.0					
Blower Effluent Temp (DegF)	124		Blower Effluent PID (ppm)	0.0					
Blower Effluent Pressure ("H2O)	13								
Transfer Pump Total Runtime (hrs)	25,025.1		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)	48	7500	164	12.0	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	41	3900	85	0.0
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	50	4250	93	13.2	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	42	2800	61	0.0
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	42	4800	105	1.5	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	40	6500	142	25.4
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	41	4100	89	0.0	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	43	2700	59	0.0
Air Sparge System									
Compressor 1 Pressure (psi)	Off for repairs				Compressor 2 Pressure (psi)	87			
Compressor 1 Temperature (degF)	Off for repairs				Compressor 2 Temperature (degF)	222			
Compressor 1 Runtime (hrs)	27,317.0				Compressor 2 Runtime (hrs)	19,414.0			
Manifold Regulator Pressure (psi)	80								
AS Manifold Legs - Pressure/Flow Rate									
	Pressure		Flow Rate			Pressure		Flow Rate	
AS-1 (psi)/(cfm)	16		5		AS-11 (psi)/(cfm)	15		9	
AS-2 (psi)/(cfm)	15		4		AS-12B (psi)/(cfm)	15		9	
AS-3 (psi)/(cfm)	14		7		AS-13B (psi)/(cfm)	14		8	
AS-4 (psi)/(cfm)	14		17		AS-14 (psi)/(cfm)	15		9	
AS-5 (psi)/(cfm)	16		9		AS-15 (psi)/(cfm)	15		9	
AS-6 (psi)/(cfm)	15		6		AS-16B (psi)/(cfm)	14		6	
AS-7 (psi)/(cfm)	15		6		AS-17 (psi)/(cfm)	15		9	
AS-8 (psi)/(cfm)	15		9		AS-18 (psi)/(cfm)	15		5	
AS-9 (psi)/(cfm)	15		12		AS-19 (psi)/(cfm)	15		6	
AS-10B (psi)/(cfm)	14		8						

Notes, Comments & Observations:

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



Tuesday, March 07, 2017

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

Project ID: ENSAFE WESTBURY
Sample ID#s: BX76365 - BX76366

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

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

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

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

Sincerely yours,

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

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #MA-CT-007
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
VT Lab Registration #VT11301



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



Analysis Report

March 07, 2017

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

Sample Information

Matrix: AIR
Location Code: ENVIOTR
Rush Request: 72 Hour
P.O.#:
Canister Id: 777

Custody Information

Collected by: DW
Received by: LB
Analyzed by: see "By" below

Date

02/23/17 12:34
02/27/17 16:49

Time

Laboratory Data

SDG ID: GBX76365
Phoenix ID: BX76365

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	0.146	ND	1.00	03/02/17	KCA	1
1,1,1-Trichloroethane	0.652	0.183	3.56	1.00	03/02/17	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	03/02/17	KCA	1
1,1,2-Trichloroethane	ND	0.183	ND	1.00	03/02/17	KCA	1
1,1-Dichloroethane	ND	0.247	ND	1.00	03/02/17	KCA	1
1,1-Dichloroethene	ND	0.252	ND	1.00	03/02/17	KCA	1
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	03/02/17	KCA	1
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	03/02/17	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	03/02/17	KCA	1
1,2-Dichlorobenzene	ND	0.166	ND	1.00	03/02/17	KCA	1
1,2-Dichloroethane	ND	0.247	ND	1.00	03/02/17	KCA	1
1,2-dichloropropane	ND	0.217	ND	1.00	03/02/17	KCA	1
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	03/02/17	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	03/02/17	KCA	1
1,3-Butadiene	ND	0.452	ND	1.00	03/02/17	KCA	1
1,3-Dichlorobenzene	ND	0.166	ND	1.00	03/02/17	KCA	1
1,4-Dichlorobenzene	ND	0.166	ND	1.00	03/02/17	KCA	1
1,4-Dioxane	ND	0.278	ND	1.00	03/02/17	KCA	1
2-Hexanone(MBK)	ND	0.244	ND	1.00	03/02/17	KCA	1
4-Ethyltoluene	ND	0.204	ND	1.00	03/02/17	KCA	1
4-Isopropyltoluene	ND	0.182	ND	1.00	03/02/17	KCA	1
4-Methyl-2-pentanone(MIBK)	ND	0.244	ND	1.00	03/02/17	KCA	1
Acetone	4.96	0.421	11.8	1.00	03/02/17	KCA	1
Acrylonitrile	ND	0.461	ND	1.00	03/02/17	KCA	1
Benzene	ND	0.313	ND	1.00	03/02/17	KCA	1
Benzyl chloride	ND	0.193	ND	1.00	03/02/17	KCA	1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	ND	1.00	03/02/17	KCA	1
Bromoform	ND	0.097	ND	1.00	03/02/17	KCA	1
Bromomethane	ND	0.258	ND	1.00	03/02/17	KCA	1
Carbon Disulfide	ND	0.321	ND	1.00	03/02/17	KCA	1
Carbon Tetrachloride	0.078	0.040	0.49	0.25	03/02/17	KCA	1
Chlorobenzene	ND	0.217	ND	1.00	03/02/17	KCA	1
Chloroethane	ND	0.379	ND	1.00	03/02/17	KCA	1
Chloroform	ND	0.205	ND	1.00	03/02/17	KCA	1
Chloromethane	ND	0.485	ND	1.00	03/02/17	KCA	1
Cis-1,2-Dichloroethene	147	101	582	400	03/02/17	KCA	400
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	03/02/17	KCA	1
Cyclohexane	ND	0.291	ND	1.00	03/02/17	KCA	1
Dibromochloromethane	ND	0.118	ND	1.00	03/02/17	KCA	1
Dichlorodifluoromethane	0.431	0.202	2.13	1.00	03/02/17	KCA	1
Ethanol	3.04	0.531	5.72	1.00	03/02/17	KCA	1
Ethyl acetate	ND	0.278	ND	1.00	03/02/17	KCA	1
Ethylbenzene	ND	0.230	ND	1.00	03/02/17	KCA	1
Heptane	ND	0.244	ND	1.00	03/02/17	KCA	1
Hexachlorobutadiene	ND	0.094	ND	1.00	03/02/17	KCA	1
Hexane	0.367	S 0.284	1.29	1.00	03/02/17	KCA	1
Isopropylalcohol	0.624	0.407	1.53	1.00	03/02/17	KCA	1
Isopropylbenzene	ND	0.204	ND	1.00	03/02/17	KCA	1
m,p-Xylene	ND	0.230	ND	1.00	03/02/17	KCA	1
Methyl Ethyl Ketone	ND	0.339	ND	1.00	03/02/17	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	03/02/17	KCA	1
Methylene Chloride	0.485	S 0.288	1.68	1.00	03/02/17	KCA	1
n-Butylbenzene	ND	0.182	ND	1.00	03/02/17	KCA	1
o-Xylene	ND	0.230	ND	1.00	03/02/17	KCA	1
Propylene	ND	0.581	ND	1.00	03/02/17	KCA	1
sec-Butylbenzene	ND	0.182	ND	1.00	03/02/17	KCA	1
Styrene	ND	0.235	ND	1.00	03/02/17	KCA	1
Tetrachloroethene	3070	14.8	20800	100	03/02/17	KCA	400
Tetrahydrofuran	ND	0.339	ND	1.00	03/02/17	KCA	1
Toluene	ND	0.266	ND	1.00	03/02/17	KCA	1
Trans-1,2-Dichloroethene	2.71	0.252	10.7	1.00	03/02/17	KCA	1
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	03/02/17	KCA	1
Trichloroethene	318	18.6	1710	100	03/02/17	KCA	400
Trichlorofluoromethane	0.293	0.178	1.65	1.00	03/02/17	KCA	1
Trichlorotrifluoroethane	ND	0.131	ND	1.00	03/02/17	KCA	1
Vinyl Chloride	ND	0.098	ND	0.25	03/02/17	KCA	1
<u>QA/QC Surrogates</u>							
% Bromofluorobenzene	106	%	106	%	03/02/17	KCA	1

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

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:

S - Laboratory solvent, contamination is possible.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

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Phyllis Shiller, Laboratory Director

March 07, 2017

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



Analysis Report

March 07, 2017

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

Sample Information

Matrix: AIR
Location Code: ENVIOTR
Rush Request: 72 Hour
P.O.#:
Canister Id: 788

Custody Information

Collected by: DW
Received by: LB
Analyzed by: see "By" below

Date

02/23/17
02/27/17

Time

12:30
16:49

Laboratory Data

SDG ID: GBX76365
Phoenix ID: BX76366

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	03/02/17	KCA	1	1
1,1,1-Trichloroethane	ND	0.183	ND	1.00	03/02/17	KCA	1	
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	03/02/17	KCA	1	
1,1,2-Trichloroethane	ND	0.183	ND	1.00	03/02/17	KCA	1	
1,1-Dichloroethane	ND	0.247	ND	1.00	03/02/17	KCA	1	
1,1-Dichloroethene	ND	0.252	ND	1.00	03/02/17	KCA	1	
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	03/02/17	KCA	1	
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	03/02/17	KCA	1	
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	03/02/17	KCA	1	
1,2-Dichlorobenzene	ND	0.166	ND	1.00	03/02/17	KCA	1	
1,2-Dichloroethane	ND	0.247	ND	1.00	03/02/17	KCA	1	
1,2-dichloropropane	ND	0.217	ND	1.00	03/02/17	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	03/02/17	KCA	1	
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	03/02/17	KCA	1	
1,3-Butadiene	ND	0.452	ND	1.00	03/02/17	KCA	1	
1,3-Dichlorobenzene	ND	0.166	ND	1.00	03/02/17	KCA	1	
1,4-Dichlorobenzene	ND	0.166	ND	1.00	03/02/17	KCA	1	
1,4-Dioxane	ND	0.278	ND	1.00	03/02/17	KCA	1	
2-Hexanone(MBK)	ND	0.244	ND	1.00	03/02/17	KCA	1	1
4-Ethyltoluene	ND	0.204	ND	1.00	03/02/17	KCA	1	1
4-Isopropyltoluene	ND	0.182	ND	1.00	03/02/17	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	0.244	ND	1.00	03/02/17	KCA	1	
Acetone	3.08	S 0.421	7.31	1.00	03/02/17	KCA	1	
Acrylonitrile	ND	0.461	ND	1.00	03/02/17	KCA	1	
Benzene	ND	0.313	ND	1.00	03/02/17	KCA	1	
Benzyl chloride	ND	0.193	ND	1.00	03/02/17	KCA	1	

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	ND	1.00	03/02/17	KCA	1
Bromoform	ND	0.097	ND	1.00	03/02/17	KCA	1
Bromomethane	ND	0.258	ND	1.00	03/02/17	KCA	1
Carbon Disulfide	ND	0.321	ND	1.00	03/02/17	KCA	1
Carbon Tetrachloride	ND	0.040	ND	0.25	03/02/17	KCA	1
Chlorobenzene	ND	0.217	ND	1.00	03/02/17	KCA	1
Chloroethane	ND	0.379	ND	1.00	03/02/17	KCA	1
Chloroform	ND	0.205	ND	1.00	03/02/17	KCA	1
Chloromethane	ND	0.485	ND	1.00	03/02/17	KCA	1
Cis-1,2-Dichloroethene	ND	0.252	ND	1.00	03/02/17	KCA	1
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	03/02/17	KCA	1
Cyclohexane	ND	0.291	ND	1.00	03/02/17	KCA	1
Dibromochloromethane	ND	0.118	ND	1.00	03/02/17	KCA	1
Dichlorodifluoromethane	0.434	0.202	2.14	1.00	03/02/17	KCA	1
Ethanol	0.578	0.531	1.09	1.00	03/02/17	KCA	1
Ethyl acetate	1.17	0.278	4.21	1.00	03/02/17	KCA	1
Ethylbenzene	ND	0.230	ND	1.00	03/02/17	KCA	1
Heptane	ND	0.244	ND	1.00	03/02/17	KCA	1
Hexachlorobutadiene	ND	0.094	ND	1.00	03/02/17	KCA	1
Hexane	ND	0.284	ND	1.00	03/02/17	KCA	1
Isopropylalcohol	ND	0.407	ND	1.00	03/02/17	KCA	1
Isopropylbenzene	ND	0.204	ND	1.00	03/02/17	KCA	1
m,p-Xylene	ND	0.230	ND	1.00	03/02/17	KCA	1
Methyl Ethyl Ketone	0.616	0.339	1.82	1.00	03/02/17	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	03/02/17	KCA	1
Methylene Chloride	ND	0.288	ND	1.00	03/02/17	KCA	1
n-Butylbenzene	ND	0.182	ND	1.00	03/02/17	KCA	1
o-Xylene	ND	0.230	ND	1.00	03/02/17	KCA	1
Propylene	ND	0.581	ND	1.00	03/02/17	KCA	1
sec-Butylbenzene	ND	0.182	ND	1.00	03/02/17	KCA	1
Styrene	ND	0.235	ND	1.00	03/02/17	KCA	1
Tetrachloroethene	0.312	0.037	2.11	0.25	03/02/17	KCA	1
Tetrahydrofuran	ND	0.339	ND	1.00	03/02/17	KCA	1
Toluene	ND	0.266	ND	1.00	03/02/17	KCA	1
Trans-1,2-Dichloroethene	ND	0.252	ND	1.00	03/02/17	KCA	1
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	03/02/17	KCA	1
Trichloroethene	0.253	0.047	1.36	0.25	03/02/17	KCA	1
Trichlorofluoromethane	ND	0.178	ND	1.00	03/02/17	KCA	1
Trichlorotrifluoroethane	ND	0.131	ND	1.00	03/02/17	KCA	1
Vinyl Chloride	ND	0.098	ND	0.25	03/02/17	KCA	1
<u>QA/QC Surrogates</u>							
% Bromofluorobenzene	103	%	103	%	03/02/17	KCA	1

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


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:

S - Laboratory solvent, contamination is possible.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

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Phyllis Shiller, Laboratory Director

March 07, 2017

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



QA/QC Report

March 07, 2017

QA/QC Data

SDG I.D.: GBX76365

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 377987 (ppbv), QC Sample No: BX77993 (BX76365 (1X, 400X) , BX76366)												
<u>Volatiles</u>												
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.183	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.183	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.247	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.252	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	121	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.166	ND	1.00	95	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.247	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.216	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	95	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.452	ND	1.00	89	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.166	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.166	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.278	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.244	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.204	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.182	ND	1.00	100	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.244	ND	1.00	95	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.421	ND	1.00	92	28.3	29.2	11.9	12.3	3.3	70 - 130	25
Acrylonitrile	ND	0.461	ND	1.00	86	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.313	ND	1.00	94	ND	ND	ND	ND	NC	70 - 130	25
Benzyl chloride	ND	0.193	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.149	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.097	ND	1.00	85	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.257	ND	1.00	93	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.321	ND	1.00	100	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.040	ND	0.25	93	ND	ND	ND	ND	NC	70 - 130	25
Chlorobenzene	ND	0.217	ND	1.00	92	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.379	ND	1.00	90	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.205	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
Chloromethane	ND	0.484	ND	1.00	124	2.56	2.54	1.24	1.23	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.256	ND	1.01	96	ND	ND	ND	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	100	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.291	ND	1.00	89	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.117	ND	1.00	94	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.202	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
Ethanol	ND	0.531	ND	1.00	58	309	314	164	167	1.8	70 - 130	25

QA/QC Data

SDG I.D.: GBX76365

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	0.278	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25
Ethylbenzene	ND	0.230	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
Heptane	ND	0.244	ND	1.00	95	ND	ND	ND	ND	NC	70 - 130	25
Hexachlorobutadiene	ND	0.094	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25
Hexane	ND	0.284	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
Isopropylalcohol	ND	0.407	ND	1.00	91	70.7	70.0	28.8	28.5	1.0	70 - 130	25
Isopropylbenzene	ND	0.204	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
m,p-Xylene	ND	0.230	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25
Methyl Ethyl Ketone	ND	0.339	ND	1.00	93	ND	ND	ND	ND	NC	70 - 130	25
Methyl tert-butyl ether(MTBE)	ND	0.277	ND	1.00	81	ND	ND	ND	ND	NC	70 - 130	25
Methylene Chloride	ND	0.288	ND	1.00	88	ND	ND	ND	ND	NC	70 - 130	25
n-Butylbenzene	ND	0.182	ND	1.00	105	ND	ND	ND	ND	NC	70 - 130	25
o-Xylene	ND	0.230	ND	1.00	95	ND	ND	ND	ND	NC	70 - 130	25
Propylene	ND	0.581	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25
sec-Butylbenzene	ND	0.182	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
Styrene	ND	0.235	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25
Tetrachloroethene	ND	0.037	ND	0.25	98	ND	ND	ND	ND	NC	70 - 130	25
Tetrahydrofuran	ND	0.339	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25
Toluene	ND	0.266	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
Trans-1,2-Dichloroethene	ND	0.252	ND	1.00	97	ND	ND	ND	ND	NC	70 - 130	25
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	98	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.047	ND	0.25	98	ND	ND	ND	ND	NC	70 - 130	25
Trichlorofluoromethane	ND	0.178	ND	1.00	94	ND	ND	ND	ND	NC	70 - 130	25
Trichlorotrifluoroethane	ND	0.131	ND	1.00	95	ND	ND	ND	ND	NC	70 - 130	25
Vinyl Chloride	ND	0.098	ND	0.25	93	ND	ND	ND	ND	NC	70 - 130	25
% Bromofluorobenzene	98	%	98	%	100	99	100	99	100	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
March 07, 2017

Tuesday, March 07, 2017

Criteria: None

State: NY

Sample Criteria Exceedances Report

GBX76365 - 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 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.

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*

February 14, 2017

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

RE: Ensafé Westbury, NY

Order No.: 1702064

Dear Jim Wilkinson:

American Analytical Laboratories, LLC. received 1 sample(s) on 2/8/2017 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
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#: **1702064**
14-Feb-17

CLIENT: Envirotrac
Project: Ensafé Westbury, NY

Lab SampleID	Client Sample ID	Tag No	Date Collected	Date Received	Matrix
1702064-001A	Discharge		2/8/2017 10:05:00 AM	2/8/2017 10:30:00 AM	Liquid

CHAIN OF CUSTODY

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

[illegible]



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: **1702064**

RcptNo: **1**

Logged by: **Lori Beyer** **2/8/2017 11:00:43 AM**

Completed By: **Lori Beyer** **2/8/2017 11:01:24 AM**

Reviewed By: **Karen Kelly** **2/8/2017**

Lori Beyer
Lori Beyer
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 $>0^{\circ}\text{C}$ 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 $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
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American Analytical Laboratories, LLC.
56 Toledo Street
Farmingdale, New York 11735
TEL: (631) 454-6100 FAX: (631) 454-8027
Website: www.American-Analytical.com

Case Narrative

WO#: 1702064
Date: 2/14/2017

CLIENT: Envirotrac
Project: Ensaf Westbury, NY

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

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846 and additional methods as detailed throughout the text of the report. All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives with exceptions notated in this Narrative discussion and/or in the QC Summary Section of the lab report with appropriate qualifiers. Additional quality control information such as surrogate recovery values for organic testing is provided as part of the analytical results. Batch MS/MSD results are provided in the QC section of the lab report unless the MS/MSD summary forms indicate one of your sample identifications. MS/MSD results relate only to the parent sample that was spiked.

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 following parameters (if included in this report) are not offered by NY ELAP: VOA 8260 Soil; 1,2,4,5-Tetramethylbenzene, Chlorodifluoromethane, Diisopropyl ether, Ethanol, Freon-114, p-Diethylbenzene, p-Ethyltoluene, Isopropyl Acetate, n-Amyl Acetate, n-Butyl Acetate, n-Propyl Acetate. VOA 8260 Liquid; 1,2,4,5-Tetramethylbenzene, Chlorodifluoromethane, Freon-114, p-Diethylbenzene, p-Ethyltoluene, Isopropyl Acetate, n-Amyl acetate, n-Butyl Acetate, n-Propyl Acetate. Pesticides 8081 Soil; DBCP. Herbicides 8151 Soil; 3,5-Dichlorobenzoic Acid, 4-Nitrophenol, Acifluorfen, Bentazon, Chloramben, DCPA, Picloram .Lachat 10-107-6-1B Ammonia in Soil, SM 2540G Total Volatile Solids, Soil TKN, Soil Organic Nitrogen, Percent Moisture, pH in non-potable water and temperature at which pH is measured, SM 4500-SO₃ B Sulfite in Liquid, Total Sulfur in Soil, Acid Soluble Chloride by ASTM C1152, Water Soluble Chloride by ASTM C1218, Chlorine Demand by SM 2350 B, Total Residual Chlorine in Liquid and Reactivity to Sulfide and Reactivity to Cyanide.

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.



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Website: www.American-Analytical.com

Definition Only

WO#: 1702064
Date: 2/14/2017

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.

m - Analyte was manually integrated for GC/MS.

+ - Concentration exceeds regulatory level for TCLP

American Analytical Laboratories, LLC.

Date: 14-Feb-17

ELAP ID : 11418**CLIENT:** Envirotrac**Client Sample ID:** Discharge**Lab Order:** 1702064**Collection Date:** 2/8/2017 10:05:00 AM**Project:** Ensafe Westbury, NY**Matrix:** LIQUID**Lab ID:** 1702064-001A**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	2/14/2017 3:05:00 AM
1,1,2,2-Tetrachloroethane	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
1,1,2-Trichloroethane	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
1,1-Dichloroethane	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
1,1-Dichloroethene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
1,2-Dichlorobenzene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
1,2-Dichloroethane	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
1,2-Dichloropropane	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
1,3-Dichlorobenzene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
1,4-Dichlorobenzene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
2-Chloroethyl vinyl ether	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Benzene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Bromodichloromethane	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Bromoform	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Bromomethane	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Carbon tetrachloride	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Chlorobenzene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Chloroethane	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Chloroform	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Chloromethane	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
cis-1,3-Dichloropropene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Dibromochloromethane	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Ethylbenzene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Methylene chloride	4.2	1.0	4.0	B	µg/L	1	2/14/2017 3:05:00 AM
Tetrachloroethene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Toluene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
trans-1,2-Dichloroethene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
trans-1,3-Dichloropropene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Trichloroethene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Trichlorofluoromethane	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Vinyl chloride	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Xylenes, Total	ND	0.60	6.0	U	µg/L	1	2/14/2017 3:05:00 AM
Acetone	2.4	1.0	4.0	BJ	µg/L	1	2/14/2017 3:05:00 AM

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American Analytical Laboratories, LLC.

Date: 14-Feb-17

ELAP ID : 11418**CLIENT:** Envirotrac**Client Sample ID:** Discharge**Lab Order:** 1702064**Collection Date:** 2/8/2017 10:05:00 AM**Project:** Ensafe Westbury, NY**Matrix:** LIQUID**Lab ID:** 1702064-001A**Certificate of Results**

Analyses	Sample Result	LOD	LOQ	Qual	Units	DF	Date/Time Analyzed
VOLATILE EPA METHOD 624							Analyst: LA
m,p-Xylene	ND	0.40	4.0	U	µg/L	1	2/14/2017 3:05:00 AM
Methyl tert-butyl ether	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
o-Xylene	ND	0.20	2.0	U	µg/L	1	2/14/2017 3:05:00 AM
Surr: 4-Bromofluorobenzene	101	0.20	62-132		%Rec	1	2/14/2017 3:05:00 AM
Surr: Dibromofluoromethane	95.0	0.20	72-131		%Rec	1	2/14/2017 3:05:00 AM
Surr: Toluene-d8	100	0.20	58-131		%Rec	1	2/14/2017 3:05:00 AM

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QC SUMMARY REPORT

WO#: 1702064

14-Feb-17

Client: Envirotrac
Project: Ensaf Westbury, NY

BatchID: 12625

Sample ID	LCS-12625	SampType:	LCS	TestCode:	624_W	Units:	µg/L	Prep Date:	2/13/2017	RunNo:	22348
Client ID:	LCSW	Batch ID:	12625	TestNo:	E624	E624		Analysis Date:	2/14/2017	SeqNo:	410101
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	43	2.0	50.00	0	85.4	54	134				
1,1,2,2-Tetrachloroethane	30	2.0	50.00	0	60.5	38	133				
1,1,2-Trichloroethane	32	2.0	50.00	0	64.1	53	132				
1,1-Dichloroethane	38	2.0	50.00	0	76.7	46	138				
1,1-Dichloroethene	47	2.0	50.00	0	94.5	47	137				
1,2-Dichlorobenzene	32	2.0	50.00	0	63.9	47	134				
1,2-Dichloroethane	33	2.0	50.00	0	65.7	52	136				
1,2-Dichloropropane	36	2.0	50.00	0	71.0	47	145				
1,3-Dichlorobenzene	33	2.0	50.00	0	66.2	47	136				
1,4-Dichlorobenzene	32	2.0	50.00	0	64.6	44	134				
2-Chloroethyl vinyl ether	ND	2.0	50.00	0	0	40	130				SU
Benzene	38	2.0	50.00	0	76.0	51	138				
Bromodichloromethane	35	2.0	50.00	0	70.2	48	143				
Bromoform	32	2.0	50.00	0	63.6	34	138				
Bromomethane	29	2.0	50.00	0	57.6	28	152				
Carbon tetrachloride	44	2.0	50.00	0	88.9	52	138				
Chlorobenzene	37	2.0	50.00	0	73.9	48	133				
Chloroethane	36	2.0	50.00	0	72.6	51	147				
Chloroform	37	2.0	50.00	0	73.6	54	136				
Chloromethane	36	2.0	50.00	0	72.5	58	146				
cis-1,3-Dichloropropene	34	2.0	50.00	0	67.4	52	138				
Dibromochloromethane	33	2.0	50.00	0	65.0	53	131				
Ethylbenzene	41	2.0	50.00	0	81.9	53	134				
Methylene chloride	17	4.0	50.00	0	33.6	13	100				B
Tetrachloroethene	39	2.0	50.00	0	78.1	44	126				
Toluene	38	2.0	50.00	0	76.2	54	134				

Qualifiers: S Spike Recovery outside accepted recovery limits

W Sample container temperature is out of limit as specified at testcode



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QC SUMMARY REPORT

WO#: 1702064

14-Feb-17

Client: Envirotrac
Project: Ensafe Westbury, NY

BatchID: 12625

Sample ID	LCS-12625	SampType:	LCS	TestCode:	624_W	Units:	µg/L	Prep Date:	2/13/2017	RunNo:	22348
Client ID:	LCSW	Batch ID:	12625	TestNo:	E624	E624		Analysis Date:	2/14/2017	SeqNo:	410101
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,2-Dichloroethene	41	2.0	50.00	0	82.3	44	138				
trans-1,3-Dichloropropene	30	2.0	50.00	0	59.5	46	137				
Trichloroethene	40	2.0	50.00	0	79.8	52	134				
Trichlorofluoromethane	44	2.0	50.00	0	87.7	56	151				
Vinyl chloride	46	2.0	50.00	0	91.7	55	151				
Acetone	1.7	4.0	50.00	0	3.38	45	120				BJS
Surr: 4-Bromofluorobenzene	50		50.00		100	62	132				
Surr: Dibromofluoromethane	47		50.00		94.4	72	131				
Surr: Toluene-d8	49		50.00		98.7	58	131				

Sample ID	MB-12625	SampType:	MBLK	TestCode:	624_W	Units:	µg/L	Prep Date:	2/13/2017	RunNo:	22348
Client ID:	PBW	Batch ID:	12625	TestNo:	E624	E624		Analysis Date:	2/14/2017	SeqNo:	410102
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1-Trichloroethane	ND	2.0									U
1,1,2,2-Tetrachloroethane	ND	2.0									U
1,1,2-Trichloroethane	ND	2.0									U
1,1-Dichloroethane	ND	2.0									U
1,1-Dichloroethene	ND	2.0									U
1,2-Dichlorobenzene	ND	2.0									U
1,2-Dichloroethane	ND	2.0									U
1,2-Dichloropropane	ND	2.0									U
1,3-Dichlorobenzene	ND	2.0									U
1,4-Dichlorobenzene	ND	2.0									U
2-Chloroethyl vinyl ether	ND	2.0									U

Qualifiers: S Spike Recovery outside accepted recovery limits

W Sample container temperature is out of limit as specified at testcode



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QC SUMMARY REPORT

WO#: 1702064

14-Feb-17

Client: Envirotrac
Project: Ensae Westbury, NY

BatchID: 12625

Sample ID	MB-12625	SampType:	MBLK	TestCode:	624_W	Units:	µg/L	Prep Date:	2/13/2017	RunNo:	22348
Client ID:	PBW	Batch ID:	12625	TestNo:	E624	E624		Analysis Date:	2/14/2017	SeqNo:	410102
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	2.0									U
Bromodichloromethane	ND	2.0									U
Bromoform	ND	2.0									U
Bromomethane	ND	2.0									U
Carbon tetrachloride	ND	2.0									U
Chlorobenzene	ND	2.0									U
Chloroethane	ND	2.0									U
Chloroform	ND	2.0									U
Chloromethane	ND	2.0									U
cis-1,3-Dichloropropene	ND	2.0									U
Dibromochloromethane	ND	2.0									U
Ethylbenzene	ND	2.0									U
Methylene chloride	4.2	4.0									
Tetrachloroethene	ND	2.0									U
Toluene	ND	2.0									U
trans-1,2-Dichloroethene	ND	2.0									U
trans-1,3-Dichloropropene	ND	2.0									U
Trichloroethene	ND	2.0									U
Trichlorofluoromethane	ND	2.0									U
Vinyl chloride	ND	2.0									U
Xylenes, Total	ND	6.0									U
Acetone	2.0	4.0									J
m,p-Xylene	ND	4.0									U
Methyl tert-butyl ether	ND	2.0									U
o-Xylene	ND	2.0									U
Surr: 4-Bromofluorobenzene	52		50.00		104	62	132				

Qualifiers: S Spike Recovery outside accepted recovery limits

W Sample container temperature is out of limit as specified at testcode

Original



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QC SUMMARY REPORT

WO#: 1702064

14-Feb-17

Client: Envirotrac
Project: Ensafe Westbury, NY

BatchID: 12625

Sample ID	MB-12625	SampType:	MBLK	TestCode:	624_W	Units:	µg/L	Prep Date:	2/13/2017	RunNo:	22348
Client ID:	PBW	Batch ID:	12625	TestNo:	E624	E624		Analysis Date:	2/14/2017	SeqNo:	410102
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
Surr: Dibromofluoromethane		45			50.00		89.0	72	131		
Surr: Toluene-d8		49			50.00		97.8	58	131		

Qualifiers: S Spike Recovery outside accepted recovery limits

W Sample container temperature is out of limit as specified at testcode