

August 9, 2021

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: July 2021  
Frost Street Sites: Site ID Nos. 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 Nos. 1-30043 I, L, M) for operation, maintenance, and monitoring (OM&M) activities completed in July 2021 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).

One alarm call was received on July 30 for the motor soft starters and the system shutdown. The SVE portion of the system was restarted remotely on July 30; the claw pump was reset manually on August 2 and the AS portion of the system resumed operation. Box fans in the system container were also replaced on August 2.

- Quantitative sampling of the SVE system granular activated carbon influent and effluent air flow was conducted on July 21, 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 (PID) readings and influent concentrations of Frost Street-related contaminants of concern (tetrachloroethene, trichloroethene, and cis-1,2-dichloroethene [30,049 µg/m<sup>3</sup>]) continue to indicate significant mass extraction.

- Effluent concentrations are below the carbon exchange indicator concentrations, as shown below.

Frost Street Sites Effluent Compliance			
System Flow Rate =		800 ft <sup>3</sup> /min	
Compound	Annual Mass Emission Limit <sup>1</sup> (lbs/year)	Carbon Exchange Required Indicator Concentration (µg/m <sup>3</sup> ) <sup>2</sup>	July 2021 Effluent Concentration (µg/m <sup>3</sup> )
Trichloroethene	500	19,000	ND
Tetrachloroethene	1,000	38,000	0.28
Vinyl Chloride	100	3,800	ND
Cis-1,2-Dichloroethene <sup>3</sup>	100	3,800	116

**Notes:**

ft/min cubic feet per minute

lbs/year pounds per year

µg/m<sup>3</sup> micrograms per cubic meter

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

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

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

**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 July except for July 26 from approximately 1:00 AM to 2:45 PM due to a thunderstorm.

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 next groundwater monitoring event will be performed in late August or September 2021.

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

Sincerely,

EnSafe, Inc., by



Alexandra Stark, P.E.

Attachments

Copies:	A. Tamuno, Esq., NYSDEC	<i>Via email to amtamuno@gw.dec.state.ny.us</i>
	C. Bethoney, NYSDOH	<i>Via email to charlotte.bethoney@health.ny.gov</i>
	J. Nealon, NYSDOH	<i>Via email to jacquelyn.nealon@health.ny.gov</i>
	R. Putnam, NCDOH	<i>Via email to rputnam@nassaucountyny.gov</i>
	J. Vasquez, U.S. EPA	<i>Via email to vazquez.julio@epa.gov</i>
	T. Pupilla, Sanders Equities	<i>Via email to tpupilla@sandersequities.com</i>
	J. Privitera, Esq.	<i>Via email to jprivitera@woh.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**  
**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: 21-Jul  
 Weather / Temp: Cloudy / 80 DEG  
 Technician / Operator: JW

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

System Status									
	Arrival		Departure			Arrival		Departure	
SVE Blower 1 (ON/OFF)	ON		ON		AS Compressor 1 (ON/OFF)	ON		ON	
SVE Blower 2 (ON/OFF)	OFF		OFF		AS Compressor 2 (ON/OFF)	OFF		OFF	
					Air Cooler (ON/OFF)	ON		ON	
Soil Vapor Extraction System									
Blower Air Velocity/Flow Rate (fpm)/(cfm)	4500		884		Blower 1 Total Runtime (hrs)	61,966.6			
Blower 1 Fresh Air Valve Open (%)	0				Blower 2 Total Runtime (hrs)	62,510.4			
Blower 2 Fresh Air Valve Open (%)	0				Blower 1 Air Filter Differential Pressure ("H2O)	0			
Blower Inlet Vacuum ("H2O)	56				Blower 2 Air Filter Differential Pressure ("H2O)	0			
Moisture Separator Vacuum (Hg)	2.5				VGAC-1 Influent PID (ppm)	2.0			
VGAC-1 Influent Vacuum ("H2O)	40				VGAC-1 Effluent PID (ppm)	0.0			
VGAC-1 Effluent Vacuum ("H2O)	46				VGAC-2 Influent PID (ppm)	2.0			
VGAC-2 Influent Vacuum ("H2O)	40				VGAC-2 Effluent PID (ppm)	0.0			
VGAC-2 Effluent Vacuum ("H2O)	40				VGAC-3 Influent PID (ppm)	0.0			
VGAC-3 Influent Vacuum ("H2O)	45				VGAC-3 Effluent PID (ppm)	0.0			
VGAC-3 Effluent Vacuum ("H2O)	50				Blower Effluent PID (ppm)	0.0			
VGAC-3 Influent Temp (DegF)					Transfer Pump Total Runtime (hrs)	25,044.8			
Blower Effluent Pressure ("H2O)	9				Condensate Storage Tank Level (gal)	0			
SVE Manifold Legs - Vacuum/Flow Rate/PID									
	<u>Vacuum</u>	<u>Velocity</u>	<u>Flow Rate</u>	<u>PID</u>		<u>Vacuum</u>	<u>Velocity</u>	<u>Flow Rate</u>	<u>PID</u>
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	42	6500	142	1.0	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	34	4200	92	0.0
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	44	4000	87	5.0	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	46	2900	63	0.0
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	36	3700	81	0.0	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	40	6000	131	9.0
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	34	4200	92	0.0	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	38	3000	65	1.0
Air Sparge System									
Compressor 1 Pressure (psi)	14				Compressor 2 Pressure (psi)	Off			
Compressor 1 Runtime (hrs)	3,481.1				Compressor 2 Temperature (degF)	Off			
Air Cooler Inlet Temperature (degF)	225				Compressor 2 Regulator Pressure (psi)	Off			
Air Cooler Outlet Temperature (degF)	96				Compressor 2 Runtime (hrs)	40,734			
Air Cooler Inlet Pressure (psi)	16.5				AS Manifold Temperature (degF)	94			
Air Cooler Outlet Pressure (psi)	13.5				AS Manifold Pressure	13			
AS Manifold Legs - Pressure/Flow Rate									
	<u>Pressure</u>		<u>Flow Rate</u>			<u>Pressure</u>		<u>Flow Rate</u>	
AS-1 (psi)/(cfm)	10		10		AS-11 (psi)/(cfm)	15		4	
AS-2 (psi)/(cfm)	5		6		AS-12B (psi)/(cfm)	16		15	
AS-3 (psi)/(cfm)	16		10		AS-13B (psi)/(cfm)	15		13	
AS-4 (psi)/(cfm)	15		4		AS-14 (psi)/(cfm)	17		13	
AS-5 (psi)/(cfm)	17		17		AS-15 (psi)/(cfm)	15		10	
AS-6 (psi)/(cfm)	16		10		AS-16B (psi)/(cfm)	16		12	
AS-7 (psi)/(cfm)	17		9		AS-17 (psi)/(cfm)	17		4	
AS-8 (psi)/(cfm)	15		10		AS-18 (psi)/(cfm)	15		10	
AS-9 (psi)/(cfm)	16		8		AS-19 (psi)/(cfm)	15		8	
AS-10B (psi)/(cfm)	15		10						

**Notes, Comments & Observations:**

Collected monthly samples.

**Inspection, Maintenance, Lubrication Schedule**  
**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:** 21-Jul  
**Weather / Temp:** Cloudy / 80 DEG  
**Technician / Operator:** JW

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

Maintenance Item	Perform	Completed (yes/no)	Comments
<b>SVE Blower B-1</b>			
-Inspect	Weekly	Y	
-Lubricate	As Required	N	
-Inspect Air Filter	Weekly	Y	
-Amp Draw	Quarterly	N	
-Inspect Belts	Weekly	Y	
<b>SVE Blower B-2</b>			
-Inspect	Weekly	Y	
-Lubricate	As Required	N	
-Inspect Air Filter	Weekly	Y	
-Amp Draw	Quarterly	N	
-Inspect Belts	Weekly	Y	
<b>SVE Piping</b>			
-Inspect	Weekly	Y	
-Valves	Weekly	Y	
<b>Phase Separator/Storage Tank</b>			
-Inspect	Weekly	Y	
-Check Level Switches	As Required	Y	
-Inspect water storage tank	Weekly	Y	
-Pump water to sewer drain	As Required	Y	
<b>AS Compressor 1</b>			
-Inspect	Weekly	Y	
-Lubricate	As Required	N	
-Inspect Filters	Weekly	Y	
-Amp Draw	Quarterly	N	
<b>AS Compressor 2</b>			
-Inspect	Weekly	Y	
-Lubricate	As Required	N	
-Inspect Filters	Weekly	Y	
-Amp Draw	Quarterly	N	
<b>Air Cooler</b>			
-Inspect	Weekly	Y	
-Inspect Filters	Weekly	Y	
-Amp Draw	Quarterly	N	
<b>AS Piping</b>			
-Inspect	Weekly	Y	
-Valves	Weekly	Y	
-Drain Filters/Collectors	Weekly	Y	
-Drain Pressure Tank	Weekly	Y	

**ALARM VISIT LOG**  
**AS/SVE SYSTEM**  
**101 FROST STREET, WESTBURY, NY**

[illegible]

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





Wednesday, July 28, 2021

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

Project ID: ENSAFE WESTBURY  
SDG ID: GCI79930  
Sample ID#s: CI79930 - CI79931

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

July 28, 2021

SDG I.D.: GCI79930

Project ID: ENSAFE WESTBURY

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Client Id	Lab Id	Matrix
SVE EFFLUENT	CI79930	AIR
SVE INFLUENT	CI79931	AIR



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



# Analysis Report

July 28, 2021

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: 852

## Custody Information

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

## Date

07/21/21 10:46  
07/22/21 16:34

## Time

Project ID: ENSAFE WESTBURY  
Client ID: SVE EFFLUENT

## Laboratory Data

SDG ID: GCI79930  
Phoenix ID: CI79930

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b>Volatiles (TO15)</b>							
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	07/27/21	KCA	1
1,1,1-Trichloroethane	ND	0.183	ND	1.00	07/27/21	KCA	1
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	07/27/21	KCA	1
1,1,2-Trichloroethane	ND	0.183	ND	1.00	07/27/21	KCA	1
1,1-Dichloroethane	ND	0.247	ND	1.00	07/27/21	KCA	1
1,1-Dichloroethene	ND	0.051	ND	0.20	07/27/21	KCA	1
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	07/27/21	KCA	1
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	07/27/21	KCA	1
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	07/27/21	KCA	1
1,2-Dichlorobenzene	ND	0.166	ND	1.00	07/27/21	KCA	1
1,2-Dichloroethane	ND	0.247	ND	1.00	07/27/21	KCA	1
1,2-dichloropropane	ND	0.217	ND	1.00	07/27/21	KCA	1
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	07/27/21	KCA	1
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	07/27/21	KCA	1
1,3-Butadiene	ND	0.452	ND	1.00	07/27/21	KCA	1
1,3-Dichlorobenzene	ND	0.166	ND	1.00	07/27/21	KCA	1
1,4-Dichlorobenzene	ND	0.166	ND	1.00	07/27/21	KCA	1
1,4-Dioxane	ND	0.278	ND	1.00	07/27/21	KCA	1
2-Hexanone(MBK)	0.748	0.244	3.06	1.00	07/27/21	KCA	1
4-Ethyltoluene	ND	0.204	ND	1.00	07/27/21	KCA	1
4-Isopropyltoluene	ND	0.182	ND	1.00	07/27/21	KCA	1
4-Methyl-2-pentanone(MIBK)	ND	0.244	ND	1.00	07/27/21	KCA	1
Acetone	9.44	0.421	22.4	1.00	07/27/21	KCA	1
Acrylonitrile	ND	0.461	ND	1.00	07/27/21	KCA	1
Benzene	0.659	0.313	2.10	1.00	07/27/21	KCA	1
Benzyl chloride	ND	0.193	ND	1.00	07/27/21	KCA	1

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
Bromodichloromethane	ND	0.149	ND	1.00	07/27/21	KCA	1
Bromoform	ND	0.097	ND	1.00	07/27/21	KCA	1
Bromomethane	ND	0.258	ND	1.00	07/27/21	KCA	1
Carbon Disulfide	ND	0.321	ND	1.00	07/27/21	KCA	1
Carbon Tetrachloride	0.109	0.032	0.69	0.20	07/27/21	KCA	1
Chlorobenzene	ND	0.217	ND	1.00	07/27/21	KCA	1
Chloroethane	ND	0.379	ND	1.00	07/27/21	KCA	1
Chloroform	ND	0.205	ND	1.00	07/27/21	KCA	1
Chloromethane	0.617	0.485	1.27	1.00	07/27/21	KCA	1
Cis-1,2-Dichloroethene	29.4	0.051	116	0.20	07/27/21	KCA	1
cis-1,3-Dichloropropene	ND	0.221	ND	1.00	07/27/21	KCA	1
Cyclohexane	ND	0.291	ND	1.00	07/27/21	KCA	1
Dibromochloromethane	ND	0.118	ND	1.00	07/27/21	KCA	1
Dichlorodifluoromethane	0.722	0.202	3.57	1.00	07/27/21	KCA	1
Ethanol	16.7	0.531	31.4	1.00	07/27/21	KCA	1
Ethyl acetate	1.04	0.278	3.75	1.00	07/27/21	KCA	1
Ethylbenzene	ND	0.230	ND	1.00	07/27/21	KCA	1
Heptane	ND	0.244	ND	1.00	07/27/21	KCA	1
Hexachlorobutadiene	ND	0.094	ND	1.00	07/27/21	KCA	1
Hexane	3.81	0.284	13.4	1.00	07/27/21	KCA	1
Isopropylalcohol	0.945	0.407	2.32	1.00	07/27/21	KCA	1
Isopropylbenzene	ND	0.204	ND	1.00	07/27/21	KCA	1
m,p-Xylene	0.468	0.230	2.03	1.00	07/27/21	KCA	1
Methyl Ethyl Ketone	1.59	0.339	4.69	1.00	07/27/21	KCA	1
Methyl tert-butyl ether(MTBE)	ND	0.278	ND	1.00	07/27/21	KCA	1
Methylene Chloride	14.3	0.864	49.6	3.00	07/27/21	KCA	1
n-Butylbenzene	ND	0.182	ND	1.00	07/27/21	KCA	1
o-Xylene	ND	0.230	ND	1.00	07/27/21	KCA	1
Propylene	0.639	0.581	1.10	1.00	07/27/21	KCA	1
sec-Butylbenzene	ND	0.182	ND	1.00	07/27/21	KCA	1
Styrene	ND	0.235	ND	1.00	07/27/21	KCA	1
Tetrachloroethene	0.041	0.037	0.28	0.25	07/27/21	KCA	1
Tetrahydrofuran	ND	0.339	ND	1.00	07/27/21	KCA	1
Toluene	0.837	0.266	3.15	1.00	07/27/21	KCA	1
Trans-1,2-Dichloroethene	0.351	0.252	1.39	1.00	07/27/21	KCA	1
trans-1,3-Dichloropropene	ND	0.221	ND	1.00	07/27/21	KCA	1
Trichloroethene	ND	0.037	ND	0.20	07/27/21	KCA	1
Trichlorofluoromethane	0.384	0.178	2.16	1.00	07/27/21	KCA	1
Trichlorotrifluoroethane	ND	0.131	ND	1.00	07/27/21	KCA	1
Vinyl Chloride	ND	0.078	ND	0.20	07/27/21	KCA	1
<b><u>QA/QC Surrogates/Internals</u></b>							
% Bromofluorobenzene	101	%	101	%	07/27/21	KCA	1
% IS-1,4-Difluorobenzene	110	%	110	%	07/27/21	KCA	1
% IS-Bromochloromethane	111	%	111	%	07/27/21	KCA	1
% IS-Chlorobenzene-d5	108	%	108	%	07/27/21	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:**

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**

**July 28, 2021**

**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

July 28, 2021

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: 730

### Custody Information

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

### Date

07/21/21  
07/22/21

### Time

10:51  
16:34

### Laboratory Data

SDG ID: GCI79930  
Phoenix ID: CI79931

Project ID: ENSAFE WESTBURY  
Client ID: SVE INFLUENT

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
<b>Volatiles (TO15)</b>							
1,1,1,2-Tetrachloroethane	ND	0.729	ND	5.00	07/26/21	KCA	5
1,1,1-Trichloroethane	ND	0.917	ND	5.00	07/26/21	KCA	5
1,1,2,2-Tetrachloroethane	ND	0.729	ND	5.00	07/26/21	KCA	5
1,1,2-Trichloroethane	ND	0.917	ND	5.00	07/26/21	KCA	5
1,1-Dichloroethane	ND	1.24	ND	5.02	07/26/21	KCA	5
1,1-Dichloroethene	ND	0.252	ND	1.00	07/26/21	KCA	5
1,2,4-Trichlorobenzene	ND	0.674	ND	5.00	07/26/21	KCA	5
1,2,4-Trimethylbenzene	ND	1.02	ND	5.01	07/26/21	KCA	5
1,2-Dibromoethane(EDB)	ND	0.651	ND	5.00	07/26/21	KCA	5
1,2-Dichlorobenzene	ND	0.832	ND	5.00	07/26/21	KCA	5
1,2-Dichloroethane	ND	1.24	ND	5.02	07/26/21	KCA	5
1,2-dichloropropane	ND	1.08	ND	4.99	07/26/21	KCA	5
1,2-Dichlorotetrafluoroethane	ND	0.716	ND	5.00	07/26/21	KCA	5
1,3,5-Trimethylbenzene	ND	1.02	ND	5.01	07/26/21	KCA	5
1,3-Butadiene	ND	2.26	ND	5.00	07/26/21	KCA	5
1,3-Dichlorobenzene	ND	0.832	ND	5.00	07/26/21	KCA	5
1,4-Dichlorobenzene	ND	0.832	ND	5.00	07/26/21	KCA	5
1,4-Dioxane	ND	1.39	ND	5.01	07/26/21	KCA	5
2-Hexanone(MBK)	ND	1.22	ND	4.99	07/26/21	KCA	5
4-Ethyltoluene	ND	1.02	ND	5.01	07/26/21	KCA	5
4-Isopropyltoluene	ND	0.911	ND	5.00	07/26/21	KCA	5
4-Methyl-2-pentanone(MIBK)	ND	1.22	ND	4.99	07/26/21	KCA	5
Acetone	7.62	2.11	18.1	5.01	07/26/21	KCA	5
Acrylonitrile	ND	2.31	ND	5.01	07/26/21	KCA	5
Benzene	ND	1.57	ND	5.01	07/26/21	KCA	5
Benzyl chloride	ND	0.966	ND	5.00	07/26/21	KCA	5

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND	0.747	ND	5.00	07/26/21	KCA	5	
Bromoform	ND	0.484	ND	5.00	07/26/21	KCA	5	
Bromomethane	ND	1.29	ND	5.01	07/26/21	KCA	5	
Carbon Disulfide	ND	1.61	ND	5.01	07/26/21	KCA	5	
Carbon Tetrachloride	ND	0.159	ND	1.00	07/26/21	KCA	5	
Chlorobenzene	ND	1.09	ND	5.01	07/26/21	KCA	5	
Chloroethane	ND	1.90	ND	5.01	07/26/21	KCA	5	
Chloroform	ND	1.02	ND	4.98	07/26/21	KCA	5	
Chloromethane	ND	2.42	ND	4.99	07/26/21	KCA	5	
Cis-1,2-Dichloroethene	121	0.252	479	1.00	07/26/21	KCA	5	
cis-1,3-Dichloropropene	ND	1.10	ND	4.99	07/26/21	KCA	5	
Cyclohexane	ND	1.45	ND	4.99	07/26/21	KCA	5	
Dibromochloromethane	ND	0.587	ND	5.00	07/26/21	KCA	5	
Dichlorodifluoromethane	ND	1.01	ND	4.99	07/26/21	KCA	5	
Ethanol	175	2.66	330	5.01	07/26/21	KCA	5	1
Ethyl acetate	ND	1.39	ND	5.01	07/26/21	KCA	5	1
Ethylbenzene	ND	1.15	ND	4.99	07/26/21	KCA	5	
Heptane	ND	1.22	ND	5.00	07/26/21	KCA	5	
Hexachlorobutadiene	ND	0.469	ND	5.00	07/26/21	KCA	5	
Hexane	ND	1.42	ND	5.00	07/26/21	KCA	5	
Isopropylalcohol	3.67	2.04	9.02	5.01	07/26/21	KCA	5	
Isopropylbenzene	ND	1.02	ND	5.01	07/26/21	KCA	5	
m,p-Xylene	ND	1.15	ND	4.99	07/26/21	KCA	5	
Methyl Ethyl Ketone	ND	1.70	ND	5.01	07/26/21	KCA	5	
Methyl tert-butyl ether(MTBE)	ND	1.39	ND	5.01	07/26/21	KCA	5	
Methylene Chloride	ND	4.32	ND	15.0	07/26/21	KCA	5	
n-Butylbenzene	ND	0.911	ND	5.00	07/26/21	KCA	5	1
o-Xylene	ND	1.15	ND	4.99	07/26/21	KCA	5	
Propylene	ND	2.91	ND	5.01	07/26/21	KCA	5	1
sec-Butylbenzene	ND	0.911	ND	5.00	07/26/21	KCA	5	1
Styrene	ND	1.17	ND	4.98	07/26/21	KCA	5	
Tetrachloroethene	4210	5.53	28500	37.5	07/27/21	KCA	150	
Tetrahydrofuran	ND	1.70	ND	5.01	07/26/21	KCA	5	1
Toluene	2.95	1.33	11.1	5.01	07/26/21	KCA	5	
Trans-1,2-Dichloroethene	ND	1.26	ND	4.99	07/26/21	KCA	5	
trans-1,3-Dichloropropene	ND	1.10	ND	4.99	07/26/21	KCA	5	
Trichloroethene	199	0.186	1070	1.00	07/26/21	KCA	5	
Trichlorofluoromethane	ND	0.891	ND	5.00	07/26/21	KCA	5	
Trichlorotrifluoroethane	ND	0.653	ND	5.00	07/26/21	KCA	5	
Vinyl Chloride	ND	0.391	ND	1.00	07/26/21	KCA	5	
<b><u>QA/QC Surrogates/Internals</u></b>								
% Bromofluorobenzene (5x)	100	%	100	%	07/26/21	KCA	5	
% IS-1,4-Difluorobenzene (5x)	104	%	104	%	07/26/21	KCA	5	
% IS-Bromochloromethane (5x)	105	%	105	%	07/26/21	KCA	5	
% IS-Chlorobenzene-d5 (5x)	106	%	106	%	07/26/21	KCA	5	
% Bromofluorobenzene (75x)	100	%	100	%	07/27/21	KCA	75	
% IS-1,4-Difluorobenzene (75x)	110	%	110	%	07/27/21	KCA	75	
% IS-Bromochloromethane (75x)	112	%	112	%	07/27/21	KCA	75	
% IS-Chlorobenzene-d5 (75x)	107	%	107	%	07/27/21	KCA	75	

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution
% Bromofluorobenzene (150x)	100	%	100	%	07/27/21	KCA	150
% IS-1,4-Difluorobenzene (150x)	106	%	106	%	07/27/21	KCA	150
% IS-Bromochloromethane (150x)	104	%	104	%	07/27/21	KCA	150
% IS-Chlorobenzene-d5 (150x)	106	%	106	%	07/27/21	KCA	150

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.

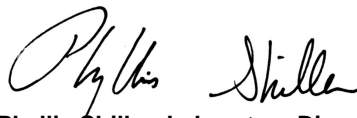
RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL  
BRL=Below Reporting Level L=Biased Low

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:**

Elevated reporting limits have been reported due to the presence of reported target compounds in the TO15 list above the calibration. Sample was run at an initial dilution.

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**

**July 28, 2021**

**Reviewed and Released by: Greg Lawrence, Assistant Lab Director**





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## QA/QC Report

July 28, 2021

### QA/QC Data

SDG I.D.: GCI79930

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 585040 (ppbv), QC Sample No: CI80898 (CI79930, CI79931 (5X, 75X) )												
<b>Volatiles</b>												
1,1,1,2-Tetrachloroethane	ND	0.250	ND	1.72	112	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.250	ND	1.36	106	ND	ND	ND	ND	NC	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.010	ND	0.07	97	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.010	ND	0.05	98	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.075	ND	0.30	96	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.100	ND	0.40	115	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.027	ND	0.20	107	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.250	ND	1.23	113	3.39	3.35	0.690	0.681	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.010	ND	0.08	103	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.050	ND	0.30	108	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.010	ND	0.04	102	0.34	0.34	0.083	0.083	0.0	70 - 130	25
1,2-dichloropropane	ND	0.010	ND	0.05	91	0.69	0.73	0.149	0.157	5.2	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.250	ND	1.75	109	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.250	ND	1.23	114	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.250	ND	0.55	87	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.050	ND	0.30	112	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.040	ND	0.24	116	1.12	1.07	0.186	0.178	NC	70 - 130	25
1,4-Dioxane	ND	0.065	ND	0.23	80	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.250	ND	1.02	78	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.250	ND	1.23	113	2.08	2.02	0.423	0.411	NC	70 - 130	25
4-Isopropyltoluene	ND	0.250	ND	1.37	113	1.50	1.50	0.273	0.274	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.250	ND	1.02	84	ND	2.09	ND	0.511	NC	70 - 130	25
Acetone	ND	0.375	ND	0.89	93	76.9	77.6	32.4	32.7	0.9	70 - 130	25
Acrylonitrile	ND	0.250	ND	0.54	91	1.83	1.90	0.845	0.876	NC	70 - 130	25
Benzene	ND	0.100	ND	0.32	92	1.15	1.17	0.361	0.366	NC	70 - 130	25
Benzyl chloride	ND	0.250	ND	1.29	91	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.010	ND	0.07	102	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.075	ND	0.77	132	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.070	ND	0.27	104	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.250	ND	0.78	105	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.043	ND	0.27	109	0.95	0.92	0.151	0.147	NC	70 - 130	25
Chlorobenzene	ND	0.100	ND	0.46	108	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.250	ND	0.66	103	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.100	ND	0.49	100	0.78	0.77	0.160	0.158	NC	70 - 130	25
Chloromethane	ND	0.250	ND	0.52	91	0.96	0.93	0.465	0.453	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.100	ND	0.40	101	ND	ND	ND	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.050	ND	0.23	100	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.250	ND	0.86	92	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.010	ND	0.09	110	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.250	ND	1.24	107	1.78	1.63	0.361	0.329	NC	70 - 130	25
Ethanol	ND	0.375	ND	0.71	108	17.2	18.6	9.15	9.88	7.7	70 - 130	25

# QA/QC Data

SDG I.D.: GC179930

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	0.250	ND	0.90	101	ND	ND	ND	ND	NC	70 - 130	25
Ethylbenzene	ND	0.250	ND	1.08	107	1.29	1.28	0.298	0.295	NC	70 - 130	25
Heptane	ND	0.250	ND	1.02	87	1.28	1.30	0.312	0.317	NC	70 - 130	25
Hexachlorobutadiene	ND	0.010	ND	0.11	107	ND	ND	ND	ND	NC	70 - 130	25
Hexane	ND	0.225	ND	0.79	87	2.65	2.74	0.753	0.778	NC	70 - 130	25
Isopropylalcohol	ND	0.375	ND	0.92	94	6.76	7.07	2.75	2.88	4.6	70 - 130	25
Isopropylbenzene	ND	0.250	ND	1.23	112	ND	ND	ND	ND	NC	70 - 130	25
m,p-Xylene	ND	0.500	ND	2.17	111	4.64	4.69	1.07	1.08	NC	70 - 130	25
Methyl Ethyl Ketone	ND	0.225	ND	0.66	86	13.1	13.1	4.46	4.46	0.0	70 - 130	25
Methyl tert-butyl ether(MTBE)	ND	0.250	ND	0.90	100	ND	ND	ND	ND	NC	70 - 130	25
Methylene Chloride	ND	1.50	ND	5.21	91	ND	ND	ND	ND	NC	70 - 130	25
n-Butylbenzene	ND	0.250	ND	1.37	109	ND	ND	ND	ND	NC	70 - 130	25
o-Xylene	ND	0.250	ND	1.08	104	1.73	1.73	0.398	0.398	NC	70 - 130	25
Propylene	ND	0.250	ND	0.43	86	ND	ND	ND	ND	NC	70 - 130	25
sec-Butylbenzene	ND	0.250	ND	1.37	110	ND	ND	ND	ND	NC	70 - 130	25
Styrene	ND	0.100	ND	0.43	114	2.52	2.44	0.592	0.574	3.1	70 - 130	25
Tetrachloroethene	ND	0.050	ND	0.34	111	8.61	8.54	1.27	1.26	0.8	70 - 130	25
Tetrahydrofuran	ND	0.250	ND	0.74	83	5.92	5.92	2.01	2.01	0.0	70 - 130	25
Toluene	ND	0.250	ND	0.94	94	6.40	6.55	1.70	1.74	2.3	70 - 130	25
Trans-1,2-Dichloroethene	ND	0.100	ND	0.40	96	ND	ND	ND	ND	NC	70 - 130	25
trans-1,3-Dichloropropene	ND	0.250	ND	1.13	95	ND	ND	ND	ND	NC	70 - 130	25
Trichloroethene	ND	0.025	ND	0.13	107	0.26	0.22	0.049	0.041	NC	70 - 130	25
Trichlorofluoromethane	ND	0.250	ND	1.40	117	ND	ND	ND	ND	NC	70 - 130	25
Trichlorotrifluoroethane	ND	0.250	ND	1.91	115	ND	ND	ND	ND	NC	70 - 130	25
Vinyl Chloride	ND	0.050	ND	0.13	93	ND	ND	ND	ND	NC	70 - 130	25
% Bromofluorobenzene	99	%	99	%	106	104	102	104	102	NC	70 - 130	25
% IS-1,4-Difluorobenzene	102	%	102	%	102	102	101	102	101	NC	60 - 140	25
% IS-Bromochloromethane	101	%	101	%	102	102	101	102	101	NC	60 - 140	25
% IS-Chlorobenzene-d5	100	%	100	%	99	100	100	100	100	NC	60 - 140	25

QA/QC Batch 585166 (ppbv), QC Sample No: CI81939 (CI79931 (150X) )

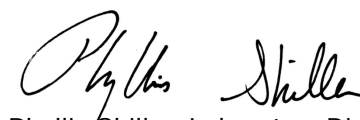
## Volatiles

Tetrachloroethene	ND	0.037	ND	0.25	112	191	181	28.2	26.7	5.5	70 - 130	25
% Bromofluorobenzene	99	%	99	%	104	103	102	103	102	NC	70 - 130	25
% IS-1,4-Difluorobenzene	102	%	102	%	105	101	108	101	108	NC	60 - 140	25
% IS-Bromochloromethane	101	%	101	%	104	99	105	99	105	NC	60 - 140	25
% IS-Chlorobenzene-d5	103	%	103	%	106	101	108	101	108	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  
July 28, 2021

Wednesday, July 28, 2021

Criteria: None  
State: NY

Sample Criteria Exceedances Report  
GCI79930 - ENVIOTR

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

July 28, 2021

SDG I.D.: GCI79930

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

### **AIRSIM**

**CHEM24 07/23/21-1:** CI79930, CI79931

The following Continuing Calibration compounds did not meet % deviation criteria: Bromoform(sim) 35%H (30%)

The following Continuing Calibration compounds did not meet Maximum % deviation criteria: Bromoform(sim) 35%H (30%)

