

November 10, 2023

Mr. Christopher Aucoin, PhD
NYSDEC, Division of Environmental Remediation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7015

Via email: Christopher.Aucoin@dec.ny.gov

Re: Progress Report: October 2023
Frost Street Sites: Site ID Nos. 1-30043 I, L, M
New Cassel Industrial Area, Westbury, New York

Dear Mr. Aucoin,

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 October 2023 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). During the month of October, no alarm calls were received.
- Quantitative sampling of the SVE system granular activated carbon influent and effluent air flow was conducted on October 13. Samples were obtained by EnviroTrac and results are included in Appendix B. Samples were collected in Summa canisters via tedlar bags that were filled directly from system sample ports. These samples were submitted to Con-Test (Pace Analytical Laboratories) and analyzed by Method TO-15.
- Photoionization detector (PID) readings continue to indicate significant mass extraction. Influent analytical data is not available for October; sample failed for an unknown reason, similar to previous influent samples. O&M data continues to demonstrate that the system is actively extracting soil vapor. The November samples will be collected after the carbon units are reconfigured for winter operations (i.e., lag carbon unit will be on the pressure side of the blower).
- Effluent concentrations are below the carbon exchange indicator concentrations as shown below.

Frost Street Sites Effluent Compliance			
System Flow Rate =		800	ft ³ /min
Compound	Annual Mass Emission Limit ¹ (lbs/year)	Carbon Exchange Required Indicator Concentration (µg/m ³) ²	October 2023 Effluent Concentration (µg/m ³)
Trichloroethene	500	19,000	21
Tetrachloroethene	1,000	38,000	20
Vinyl Chloride	100	3,800	ND
Cis-1,2-Dichloroethene ³	100	3,800	320

Notes:

ft/min cubic feet per minute

lbs/year pounds per year

µg/m³ 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 to demonstrate 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.

- Repairs to the broken pipes for air sparge wells AS-1, AS-2, and AS-3 were performed the weeks of October 2 and October 9, 2023.
 - The pipes were discovered to be broken in the main trench that extends south from the AS/SVE trailer. The broken pipes were capped, and new pipes were installed above the existing pipes.
 - The system was off from October 2 to October 10, 2023.
 - As a result of these repairs, pressure in air sparge wells AS-1, AS-2, and AS-3 have increased significantly, as shown in the O&M Logs in Appendix B.
 - Photographs showing the repairs are provided in Appendix C.

Groundwater Extraction System – Operable Unit 2

The pumps in EX-1A, EX-1B, EX-1C, and EX-1D operated near design flow rates (30, 30, 48, and 48 gallons per minute, respectively) for all of October except for approximately two hours on October 4 to facilitate replenishment of the PHIX in the system vault. To date, over 402 million gallons of water have been removed by this system.

Groundwater Sampling

The fourth quarter 2023 groundwater sampling event was performed October 3 through 5, 2023. Results will be submitting in a forthcoming report.

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

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>
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	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
Ensaf-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: 13-Oct
Weather / Temp: Sunny / 60 DEG
Technician / Operator: JW

Arrival Time: 11:00
Departure Time: 12:30

System Status									
	Arrival		Departure			Arrival		Departure	
SVE Blower 1 (ON/OFF)	OFF		ON		AS Compressor 1 (ON/OFF)	ON		ON	
SVE Blower 2 (ON/OFF)	ON		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)	4200		825		Blower 1 Total Runtime (hrs)	71,788.6			
Blower 1 Fresh Air Valve Open (%)	0				Blower 2 Total Runtime (hrs)	71,405.0			
Blower 2 Fresh Air Valve Open (%)	0				Blower 1 Air Filter Differential Pressure ("H2O)	0			
Blower Inlet Vacuum ("H2O)	52				Blower 2 Air Filter Differential Pressure ("H2O)	0			
Moisture Separator Vacuum ("Hg)	3				VGAC-1 Influent PID (ppm)	1			
VGAC-1 Influent Vacuum ("H2O)	36				VGAC-1 Effluent PID (ppm)	0			
VGAC-1 Effluent Vacuum ("H2O)	42				VGAC-2 Influent PID (ppm)	1			
VGAC-2 Influent Vacuum ("H2O)	36				VGAC-2 Effluent PID (ppm)	0			
VGAC-2 Effluent Vacuum ("H2O)	42				VGAC-3 Influent PID (ppm)	0			
VGAC-3 Influent Vacuum ("H2O)	49				VGAC-3 Effluent PID (ppm)	0			
VGAC-3 Effluent Vacuum ("H2O)	52				Blower Effluent PID (ppm)	0			
VGAC-3 Influent Temp (DegF)	-				Transfer Pump Total Runtime (hrs)	25,100.4			
Blower Effluent Pressure ("H2O)	9				Condensate Storage Tank Level (gal)	50			
SVE Manifold Legs - Vacuum/Flow Rate/PID									
	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	42	6500	142	4	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	35	4000	87	0
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	44	4000	87	0	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	46	2800	61	0
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	35	4800	105	0	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	41	5750	125	6
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	33	4000	87	0	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	36	2900	63	0
Air Sparge System									
Compressor 1 Pressure (psi)	14				Compressor 2 Pressure (psi)	Off			
Compressor 1 Runtime (hrs)	21,346.6				Compressor 2 Temperature (degF)	Off			
Air Cooler Inlet Temperature (degF)					Compressor 2 Regulator Pressure (psi)	Off			
Air Cooler Outlet Temperature (degF)	75				Compressor 2 Runtime (hrs)	40,734			
Air Cooler Inlet Pressure (psi)	18				AS Manifold Temperature (degF)	72			
Air Cooler Outlet Pressure (psi)	17.5				AS Manifold Pressure	15			
AS Manifold Legs - Pressure/Flow Rate									
	Pressure	Flow Rate			Pressure	Flow Rate			
AS-1 (psi)/(cfm)	17	12	AS-11 (psi)/(cfm)		15	7			
AS-2 (psi)/(cfm)	15	8	AS-12B (psi)/(cfm)		16	10			
AS-3 (psi)/(cfm)	10	15	AS-13B (psi)/(cfm)		15	10			
AS-4 (psi)/(cfm)	15	10	AS-14 (psi)/(cfm)		18	10			
AS-5 (psi)/(cfm)	16	7	AS-15 (psi)/(cfm)		16	6			
AS-6 (psi)/(cfm)	17	9	AS-16B (psi)/(cfm)		15	10			
AS-7 (psi)/(cfm)	15	9	AS-17 (psi)/(cfm)		16	5			
AS-8 (psi)/(cfm)	17	10	AS-18 (psi)/(cfm)		15	10			
AS-9 (psi)/(cfm)	16	10	AS-19 (psi)/(cfm)		15	6			
AS-10B (psi)/(cfm)	15	10							

Notes, Comments & Observations: _____

Collected monthly sample.

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: 13-Oct
Weather / Temp: Sunny / 60 DEG
Technician / Operator: JW

Arrival Time: 11:00
Departure Time: 12:30

Maintenance Item	Perform	Completed (yes/no)	Comments
SVE Blower B-1			
-Inspect	Weekly	Y	
-Lubricate	As Required	N	Oil changed on 4/20/23
-Inspect Air Filter	Weekly	Y	
-Amp Draw	Quarterly	N	
-Inspect Belts	Weekly	Y	
SVE Blower B-2			
-Inspect	Weekly	Y	
-Lubricate	As Required	N	Oil changed on 4/20/23
-Inspect Air Filter	Weekly	Y	
-Amp Draw	Quarterly	N	
-Inspect Belts	Weekly	Y	
SVE Piping			
-Inspect	Weekly	Y	
-Valves	Weekly	Y	
Phase Separator/Storage Tank			
-Inspect	Weekly	Y	
-Check Level Switches	As Required	Y	
-Inspect water storage tank	Weekly	Y	
-Pump water to sewer drain	As Required	Y	
AS Compressor 1			
-Inspect	Weekly	Y	
-Lubricate	As Required	N	Oil changed on 7/31/23
-Inspect Filters	Weekly	Y	
-Amp Draw	Quarterly	N	
AS Compressor 2			
-Inspect	Weekly	Y	
-Lubricate	As Required	N	
-Inspect Filters	Weekly	N	
-Amp Draw	Quarterly	N	
Air Cooler			
-Inspect	Weekly	Y	
-Inspect Filters	Weekly	Y	
-Amp Draw	Quarterly	N	
AS Piping			
-Inspect	Weekly	Y	
-Valves	Weekly	Y	
-Drain Filters/Collectors	Weekly	Y	
-Drain Pressure Tank	Weekly	Y	

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: 27-Oct
Weather / Temp: Sunny / 68 DEG
Technician / Operator: JW

Arrival Time: 12:00
Departure Time: 14:00

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)	3800		746		Blower 1 Total Runtime (hrs)	71,957.4			
Blower 1 Fresh Air Valve Open (%)	0				Blower 2 Total Runtime (hrs)	71,573.8			
Blower 2 Fresh Air Valve Open (%)	.				Blower 1 Air Filter Differential Pressure ("H2O)	0			
Blower Inlet Vacuum ("H2O)	40				Blower 2 Air Filter Differential Pressure ("H2O)	0			
Moisture Separator Vacuum ("Hg)	2.5				VGAC-1 Influent PID (ppm)	1			
VGAC-1 Influent Vacuum ("H2O)	28				VGAC-1 Effluent PID (ppm)	0			
VGAC-1 Effluent Vacuum ("H2O)	32				VGAC-2 Influent PID (ppm)	1			
VGAC-2 Influent Vacuum ("H2O)	26				VGAC-2 Effluent PID (ppm)	0			
VGAC-2 Effluent Vacuum ("H2O)	30				VGAC-3 Influent PID (ppm)	0			
VGAC-3 Influent Vacuum ("H2O)	35				VGAC-3 Effluent PID (ppm)	0			
VGAC-3 Effluent Vacuum ("H2O)	40				Blower Effluent PID (ppm)	0			
VGAC-3 Influent Temp (DegF)	-				Transfer Pump Total Runtime (hrs)	25,100.4			
Blower Effluent Pressure ("H2O)	8				Condensate Storage Tank Level (gal)	50			
SVE Manifold Legs - Vacuum/Flow Rate/PID									
	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	35	5500	120		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	28	3600	79	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	36	3000	65		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	39	2500	55	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	28	4200	92		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	32	5000	109	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	25	3600	79		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	28	2600	57	
Air Sparge System									
Compressor 1 Pressure (psi)	18.5				Compressor 2 Pressure (psi)	Off			
Compressor 1 Runtime (hrs)	21,684.3				Compressor 2 Temperature (degF)	Off			
Air Cooler Inlet Temperature (degF)					Compressor 2 Regulator Pressure (psi)	Off			
Air Cooler Outlet Temperature (degF)	85				Compressor 2 Runtime (hrs)	40,734			
Air Cooler Inlet Pressure (psi)	18.5				AS Manifold Temperature (degF)	70			
Air Cooler Outlet Pressure (psi)	17.5				AS Manifold Pressure	16			
AS Manifold Legs - Pressure/Flow Rate									
	Pressure	Flow Rate			Pressure	Flow Rate			
AS-1 (psi)/(cfm)	18	15	AS-11 (psi)/(cfm)		16	9			
AS-2 (psi)/(cfm)	17	10	AS-12B (psi)/(cfm)		17	5			
AS-3 (psi)/(cfm)	7	15	AS-13B (psi)/(cfm)		17	9			
AS-4 (psi)/(cfm)	17	10	AS-14 (psi)/(cfm)		18	9			
AS-5 (psi)/(cfm)	17	13	AS-15 (psi)/(cfm)		17	9			
AS-6 (psi)/(cfm)	18	10	AS-16B (psi)/(cfm)		17	9			
AS-7 (psi)/(cfm)	17	15	AS-17 (psi)/(cfm)		17	13			
AS-8 (psi)/(cfm)	16	10	AS-18 (psi)/(cfm)		17	13			
AS-9 (psi)/(cfm)	17	11	AS-19 (psi)/(cfm)		17	7			
AS-10B (psi)/(cfm)	16	10							

Notes, Comments & Observations:

Performed semi-annual blower maintenance.

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: 27-Oct
Weather / Temp: Sunny / 68 DEG
Technician / Operator: JW

Arrival Time: 12:00
Departure Time: 14:00

Maintenance Item	Perform	Completed (yes/no)	Comments
SVE Blower B-1			
-Inspect	Weekly	Y	
-Lubricate	As Required	Y	Oil changed on 10/27/23
-Inspect Air Filter	Weekly	Y	
-Amp Draw	Quarterly	N	
-Inspect Belts	Weekly	Y	
SVE Blower B-2			
-Inspect	Weekly	Y	
-Lubricate	As Required	Y	Oil changed on 10/27/23
-Inspect Air Filter	Weekly	Y	
-Amp Draw	Quarterly	N	
-Inspect Belts	Weekly	Y	
SVE Piping			
-Inspect	Weekly	Y	
-Valves	Weekly	Y	
Phase Separator/Storage Tank			
-Inspect	Weekly	Y	
-Check Level Switches	As Required	Y	
-Inspect water storage tank	Weekly	Y	
-Pump water to sewer drain	As Required	Y	
AS Compressor 1			
-Inspect	Weekly	Y	
-Lubricate	As Required	N	Oil changed on 7/31/23
-Inspect Filters	Weekly	Y	
-Amp Draw	Quarterly	N	
AS Compressor 2			
-Inspect	Weekly	Y	
-Lubricate	As Required	N	
-Inspect Filters	Weekly	N	
-Amp Draw	Quarterly	N	
Air Cooler			
-Inspect	Weekly	Y	
-Inspect Filters	Weekly	Y	
-Amp Draw	Quarterly	N	
AS Piping			
-Inspect	Weekly	Y	
-Valves	Weekly	Y	
-Drain Filters/Collectors	Weekly	Y	
-Drain Pressure Tank	Weekly	Y	

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

October 26, 2023

James Wilkinson
EnviroTrac Ltd - Yaphank, NY
5 Old Dock Road
Yaphank, NY 11980

Project Location: Westbury, NY
Client Job Number:
Project Number: [none]
Laboratory Work Order Number: 23J2189

Enclosed are results of analyses for samples as received by the laboratory on October 16, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kaitlyn A. Feliciano
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

EnviroTrac Ltd - Yaphank, NY
5 Old Dock Road
Yaphank, NY 11980
ATTN: James Wilkinson

REPORT DATE: 10/26/2023

PURCHASE ORDER NUMBER:

PROJECT NUMBER: [none]

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23J2189

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Westbury, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SVE Effluent	23J2189-01	Soil Gas		- EPA TO-15	
SVE Influent	23J2189-02	Soil Gas		- EPA TO-15	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

EPA TO-15

Qualifications:

L-03

Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Benzyl chloride

23J2189-01[SVE Effluent], 23J2189-02[SVE Influent], B356276-BLK1, B356276-BS1

Dichlorodifluoromethane (Freon 12)

23J2189-01[SVE Effluent], 23J2189-02[SVE Influent], B356276-BLK1, B356276-BS1

Ethanol

23J2189-01[SVE Effluent], 23J2189-02[SVE Influent], B356276-BLK1, B356276-BS1

Isopropanol

23J2189-01[SVE Effluent], 23J2189-02[SVE Influent], B356276-BLK1, B356276-BS1

Z-01

Calibrations RSD for this compound is >30% but <40%.

Analyte & Samples(s) Qualified:

Naphthalene

23J2189-01[SVE Effluent], 23J2189-02[SVE Influent], B356276-BLK1, B356276-BS1, S095401-CCV1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

ANALYTICAL RESULTS

Project Location: Westbury, NY
 Date Received: 10/16/2023
Field Sample #: SVE Effluent
Sample ID: 23J2189-01
 Sample Matrix: Soil Gas
 Sampled: 10/13/2023 12:10

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2419
 Canister Size: 3 liter
 Flow Controller ID: 4675
 Sample Type: 15 min

Work Order: 23J2189
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -6
 Receipt Vacuum(in Hg): -5.1
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Acetone	ND	8.0		ND	19	4	10/23/23 23:18	KMC
Benzene	ND	0.20		ND	0.64	4	10/23/23 23:18	KMC
Benzyl chloride	ND	0.80	L-03	ND	4.1	4	10/23/23 23:18	KMC
Bromodichloromethane	ND	0.20		ND	1.3	4	10/23/23 23:18	KMC
Bromoform	ND	0.20		ND	2.1	4	10/23/23 23:18	KMC
Bromomethane	ND	0.20		ND	0.78	4	10/23/23 23:18	KMC
1,3-Butadiene	ND	0.20		ND	0.44	4	10/23/23 23:18	KMC
2-Butanone (MEK)	ND	8.0		ND	24	4	10/23/23 23:18	KMC
Carbon Disulfide	ND	2.0		ND	6.2	4	10/23/23 23:18	KMC
Carbon Tetrachloride	ND	0.20		ND	1.3	4	10/23/23 23:18	KMC
Chlorobenzene	ND	0.20		ND	0.92	4	10/23/23 23:18	KMC
Chloroethane	ND	0.20		ND	0.53	4	10/23/23 23:18	KMC
Chloroform	0.57	0.20		2.8	0.98	4	10/23/23 23:18	KMC
Chloromethane	ND	0.40		ND	0.83	4	10/23/23 23:18	KMC
Cyclohexane	ND	0.20		ND	0.69	4	10/23/23 23:18	KMC
Dibromochloromethane	ND	0.20		ND	1.7	4	10/23/23 23:18	KMC
1,2-Dibromoethane (EDB)	ND	0.20		ND	1.5	4	10/23/23 23:18	KMC
1,2-Dichlorobenzene	ND	0.20		ND	1.2	4	10/23/23 23:18	KMC
1,3-Dichlorobenzene	ND	0.20		ND	1.2	4	10/23/23 23:18	KMC
1,4-Dichlorobenzene	ND	0.20		ND	1.2	4	10/23/23 23:18	KMC
Dichlorodifluoromethane (Freon 12)	0.34	0.20	L-03	1.7	0.99	4	10/23/23 23:18	KMC
1,1-Dichloroethane	ND	0.20		ND	0.81	4	10/23/23 23:18	KMC
1,2-Dichloroethane	ND	0.20		ND	0.81	4	10/23/23 23:18	KMC
1,1-Dichloroethylene	ND	0.20		ND	0.79	4	10/23/23 23:18	KMC
cis-1,2-Dichloroethylene	320	1.0		1300	4.0	20	10/23/23 23:42	KMC
trans-1,2-Dichloroethylene	2.6	0.20		10	0.79	4	10/23/23 23:18	KMC
1,2-Dichloropropane	ND	0.20		ND	0.92	4	10/23/23 23:18	KMC
cis-1,3-Dichloropropene	ND	0.20		ND	0.91	4	10/23/23 23:18	KMC
trans-1,3-Dichloropropene	ND	0.20		ND	0.91	4	10/23/23 23:18	KMC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.20		ND	1.4	4	10/23/23 23:18	KMC
1,4-Dioxane	ND	2.0		ND	7.2	4	10/23/23 23:18	KMC
Ethanol	ND	8.0	L-03	ND	15	4	10/23/23 23:18	KMC
Ethyl Acetate	ND	2.0		ND	7.2	4	10/23/23 23:18	KMC
Ethylbenzene	ND	0.20		ND	0.87	4	10/23/23 23:18	KMC
4-Ethyltoluene	ND	0.20		ND	0.98	4	10/23/23 23:18	KMC
Heptane	ND	0.20		ND	0.82	4	10/23/23 23:18	KMC
Hexachlorobutadiene	ND	0.20		ND	2.1	4	10/23/23 23:18	KMC

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ANALYTICAL RESULTS

Project Location: Westbury, NY
 Date Received: 10/16/2023
Field Sample #: SVE Effluent
Sample ID: 23J2189-01
 Sample Matrix: Soil Gas
 Sampled: 10/13/2023 12:10

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2419
 Canister Size: 3 liter
 Flow Controller ID: 4675
 Sample Type: 15 min

Work Order: 23J2189
 Initial Vacuum(in Hg): -30
 Final Vacuum(in Hg): -6
 Receipt Vacuum(in Hg): -5.1
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	8.0		ND	28	4	10/23/23 23:18	KMC
2-Hexanone (MBK)	ND	0.80		ND	3.3	4	10/23/23 23:18	KMC
Isopropanol	ND	8.0	L-03	ND	20	4	10/23/23 23:18	KMC
Methyl tert-Butyl Ether (MTBE)	ND	0.20		ND	0.72	4	10/23/23 23:18	KMC
Methylene Chloride	ND	2.0		ND	6.9	4	10/23/23 23:18	KMC
4-Methyl-2-pentanone (MIBK)	ND	0.20		ND	0.82	4	10/23/23 23:18	KMC
Naphthalene	ND	0.20	Z-01	ND	1.0	4	10/23/23 23:18	KMC
Propene	ND	8.0		ND	14	4	10/23/23 23:18	KMC
Styrene	ND	0.20		ND	0.85	4	10/23/23 23:18	KMC
1,1,2,2-Tetrachloroethane	ND	0.20		ND	1.4	4	10/23/23 23:18	KMC
Tetrachloroethylene	20	0.20		140	1.4	4	10/23/23 23:18	KMC
Tetrahydrofuran	ND	2.0		ND	5.9	4	10/23/23 23:18	KMC
Toluene	ND	0.20		ND	0.75	4	10/23/23 23:18	KMC
1,2,4-Trichlorobenzene	ND	0.20		ND	1.5	4	10/23/23 23:18	KMC
1,1,1-Trichloroethane	0.56	0.20		3.1	1.1	4	10/23/23 23:18	KMC
1,1,2-Trichloroethane	ND	0.20		ND	1.1	4	10/23/23 23:18	KMC
Trichloroethylene	21	0.20		120	1.1	4	10/23/23 23:18	KMC
Trichlorofluoromethane (Freon 11)	ND	0.80		ND	4.5	4	10/23/23 23:18	KMC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.80		ND	6.1	4	10/23/23 23:18	KMC
1,2,4-Trimethylbenzene	ND	0.20		ND	0.98	4	10/23/23 23:18	KMC
1,3,5-Trimethylbenzene	ND	0.20		ND	0.98	4	10/23/23 23:18	KMC
Vinyl Acetate	ND	4.0		ND	14	4	10/23/23 23:18	KMC
Vinyl Chloride	ND	0.20		ND	0.51	4	10/23/23 23:18	KMC
m&p-Xylene	ND	0.40		ND	1.7	4	10/23/23 23:18	KMC
o-Xylene	ND	0.20		ND	0.87	4	10/23/23 23:18	KMC
Surrogates	% Recovery		% REC Limits					
4-Bromofluorobenzene (1)	82.0		70-130		10/23/23 23:18			
4-Bromofluorobenzene (1)	86.2		70-130		10/23/23 23:42			

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ANALYTICAL RESULTS

Project Location: Westbury, NY
 Date Received: 10/16/2023
Field Sample #: SVE Influent
Sample ID: 23J2189-02
 Sample Matrix: Soil Gas
 Sampled: 10/13/2023 12:19

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2754
 Canister Size: 3 liter
 Flow Controller ID: 4676
 Sample Type: 15 min

Work Order: 23J2189
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -3.6
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15									
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time		Analyst
	Results	RL		Results	RL		Analyzed		
Acetone	17	4.0	L-03	41	9.5	2	10/23/23	22:54	KMC
Benzene	0.13	0.10		0.42	0.32	2	10/23/23	22:54	KMC
Benzyl chloride	ND	0.40		ND	2.1	2	10/23/23	22:54	KMC
Bromodichloromethane	ND	0.10		ND	0.67	2	10/23/23	22:54	KMC
Bromoform	ND	0.10	L-03	ND	1.0	2	10/23/23	22:54	KMC
Bromomethane	ND	0.10		ND	0.39	2	10/23/23	22:54	KMC
1,3-Butadiene	ND	0.10		ND	0.22	2	10/23/23	22:54	KMC
2-Butanone (MEK)	ND	4.0		ND	12	2	10/23/23	22:54	KMC
Carbon Disulfide	ND	1.0	L-03	ND	3.1	2	10/23/23	22:54	KMC
Carbon Tetrachloride	ND	0.10		ND	0.63	2	10/23/23	22:54	KMC
Chlorobenzene	ND	0.10		ND	0.46	2	10/23/23	22:54	KMC
Chloroethane	ND	0.10		ND	0.26	2	10/23/23	22:54	KMC
Chloroform	ND	0.10	L-03	ND	0.49	2	10/23/23	22:54	KMC
Chloromethane	0.45	0.20		0.93	0.41	2	10/23/23	22:54	KMC
Cyclohexane	ND	0.10		ND	0.34	2	10/23/23	22:54	KMC
Dibromochloromethane	ND	0.10		ND	0.85	2	10/23/23	22:54	KMC
1,2-Dibromoethane (EDB)	ND	0.10	L-03	ND	0.77	2	10/23/23	22:54	KMC
1,2-Dichlorobenzene	ND	0.10		ND	0.60	2	10/23/23	22:54	KMC
1,3-Dichlorobenzene	ND	0.10		ND	0.60	2	10/23/23	22:54	KMC
1,4-Dichlorobenzene	ND	0.10		ND	0.60	2	10/23/23	22:54	KMC
Dichlorodifluoromethane (Freon 12)	0.35	0.10	L-03	1.7	0.49	2	10/23/23	22:54	KMC
1,1-Dichloroethane	ND	0.10		ND	0.40	2	10/23/23	22:54	KMC
1,2-Dichloroethane	ND	0.10		ND	0.40	2	10/23/23	22:54	KMC
1,1-Dichloroethylene	ND	0.10		ND	0.40	2	10/23/23	22:54	KMC
cis-1,2-Dichloroethylene	1.9	0.10	L-03	7.5	0.40	2	10/23/23	22:54	KMC
trans-1,2-Dichloroethylene	ND	0.10		ND	0.40	2	10/23/23	22:54	KMC
1,2-Dichloropropane	ND	0.10		ND	0.46	2	10/23/23	22:54	KMC
cis-1,3-Dichloropropene	ND	0.10		ND	0.45	2	10/23/23	22:54	KMC
trans-1,3-Dichloropropene	ND	0.10	L-03	ND	0.45	2	10/23/23	22:54	KMC
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.10		ND	0.70	2	10/23/23	22:54	KMC
1,4-Dioxane	ND	1.0		ND	3.6	2	10/23/23	22:54	KMC
Ethanol	4.3	4.0		8.1	7.5	2	10/23/23	22:54	KMC
Ethyl Acetate	ND	1.0	L-03	ND	3.6	2	10/23/23	22:54	KMC
Ethylbenzene	ND	0.10		ND	0.43	2	10/23/23	22:54	KMC
4-Ethyltoluene	ND	0.10		ND	0.49	2	10/23/23	22:54	KMC
Heptane	ND	0.10		ND	0.41	2	10/23/23	22:54	KMC
Hexachlorobutadiene	ND	0.10	L-03	ND	1.1	2	10/23/23	22:54	KMC

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ANALYTICAL RESULTS

Project Location: Westbury, NY
 Date Received: 10/16/2023
Field Sample #: SVE Influent
Sample ID: 23J2189-02
 Sample Matrix: Soil Gas
 Sampled: 10/13/2023 12:19

Sample Description/Location:
 Sub Description/Location:
 Canister ID: 2754
 Canister Size: 3 liter
 Flow Controller ID: 4676
 Sample Type: 15 min

Work Order: 23J2189
 Initial Vacuum(in Hg): -29
 Final Vacuum(in Hg): -5
 Receipt Vacuum(in Hg): -3.6
 Flow Controller Type: Fixed-Orifice
 Flow Controller Calibration
 RPD Pre and Post-Sampling:

EPA TO-15								
Analyte	ppbv		Flag/Qual	ug/m3		Dilution	Date/Time	
	Results	RL		Results	RL		Analyzed	Analyst
Hexane	ND	4.0		ND	14	2	10/23/23 22:54	KMC
2-Hexanone (MBK)	ND	0.40		ND	1.6	2	10/23/23 22:54	KMC
Isopropanol	ND	4.0	L-03	ND	9.8	2	10/23/23 22:54	KMC
Methyl tert-Butyl Ether (MTBE)	ND	0.10		ND	0.36	2	10/23/23 22:54	KMC
Methylene Chloride	ND	1.0		ND	3.5	2	10/23/23 22:54	KMC
4-Methyl-2-pentanone (MIBK)	ND	0.10		ND	0.41	2	10/23/23 22:54	KMC
Naphthalene	ND	0.10	Z-01	ND	0.52	2	10/23/23 22:54	KMC
Propene	ND	4.0		ND	6.9	2	10/23/23 22:54	KMC
Styrene	ND	0.10		ND	0.43	2	10/23/23 22:54	KMC
1,1,2,2-Tetrachloroethane	ND	0.10		ND	0.69	2	10/23/23 22:54	KMC
Tetrachloroethylene	1.3	0.10		9.1	0.68	2	10/23/23 22:54	KMC
Tetrahydrofuran	14	1.0		40	2.9	2	10/23/23 22:54	KMC
Toluene	0.28	0.10		1.0	0.38	2	10/23/23 22:54	KMC
1,2,4-Trichlorobenzene	ND	0.10		ND	0.74	2	10/23/23 22:54	KMC
1,1,1-Trichloroethane	ND	0.10		ND	0.55	2	10/23/23 22:54	KMC
1,1,2-Trichloroethane	ND	0.10		ND	0.55	2	10/23/23 22:54	KMC
Trichloroethylene	0.20	0.10		1.1	0.54	2	10/23/23 22:54	KMC
Trichlorofluoromethane (Freon 11)	ND	0.40		ND	2.2	2	10/23/23 22:54	KMC
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.40		ND	3.1	2	10/23/23 22:54	KMC
1,2,4-Trimethylbenzene	ND	0.10		ND	0.49	2	10/23/23 22:54	KMC
1,3,5-Trimethylbenzene	ND	0.10		ND	0.49	2	10/23/23 22:54	KMC
Vinyl Acetate	ND	2.0		ND	7.0	2	10/23/23 22:54	KMC
Vinyl Chloride	ND	0.10		ND	0.26	2	10/23/23 22:54	KMC
m&p-Xylene	ND	0.20		ND	0.87	2	10/23/23 22:54	KMC
o-Xylene	ND	0.10		ND	0.43	2	10/23/23 22:54	KMC

Surrogates	% Recovery	% REC Limits	
4-Bromofluorobenzene (1)	89.7	70-130	10/23/23 22:54

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Sample Extraction Data

Prep Method:TO-15 Prep **Analytical Method:**EPA TO-15

Lab Number [Field ID]	Batch	Pressure Dilution	Pre Dilution	Pre-Dil Initial mL	Pre-Dil Final mL	Default Injection mL	Actual Injection mL	Date
23J2189-01 [SVE Effluent]	B356276	1.5	1	N/A	1000	200	75	10/23/23
23J2189-01RE1 [SVE Effluent]	B356276	1.5	1	N/A	1000	200	15	10/23/23
23J2189-02 [SVE Influent]	B356276	1.5	1	N/A	1000	200	150	10/23/23

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	
Batch B356276 - TO-15 Prep											
Blank (B356276-BLK1)					Prepared & Analyzed: 10/23/23						
Acetone	ND	0.80									
Benzene	ND	0.020									
Benzyl chloride	ND	0.020									L-03
Bromodichloromethane	ND	0.020									
Bromoform	ND	0.020									
Bromomethane	ND	0.020									
1,3-Butadiene	ND	0.020									
2-Butanone (MEK)	ND	0.80									
Carbon Disulfide	ND	0.20									
Carbon Tetrachloride	ND	0.020									
Chlorobenzene	ND	0.020									
Chloroethane	ND	0.020									
Chloroform	ND	0.020									
Chloromethane	ND	0.040									
Cyclohexane	ND	0.020									
Dibromochloromethane	ND	0.020									
1,2-Dibromoethane (EDB)	ND	0.020									
1,2-Dichlorobenzene	ND	0.020									
1,3-Dichlorobenzene	ND	0.020									
1,4-Dichlorobenzene	ND	0.020									
Dichlorodifluoromethane (Freon 12)	ND	0.020									L-03
1,1-Dichloroethane	ND	0.020									
1,2-Dichloroethane	ND	0.020									
1,1-Dichloroethylene	ND	0.020									
cis-1,2-Dichloroethylene	ND	0.020									
trans-1,2-Dichloroethylene	ND	0.020									
1,2-Dichloropropane	ND	0.020									
cis-1,3-Dichloropropene	ND	0.020									
trans-1,3-Dichloropropene	ND	0.020									
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	ND	0.020									
1,4-Dioxane	ND	0.20									
Ethanol	ND	0.80									L-03
Ethyl Acetate	ND	0.20									
Ethylbenzene	ND	0.020									
4-Ethyltoluene	ND	0.020									
Heptane	ND	0.020									
Hexachlorobutadiene	ND	0.020									
Hexane	ND	0.80									
2-Hexanone (MBK)	ND	0.020									
Isopropanol	ND	0.80									L-03
Methyl tert-Butyl Ether (MTBE)	ND	0.020									
Methylene Chloride	ND	0.20									
4-Methyl-2-pentanone (MIBK)	ND	0.020									
Naphthalene	ND	0.020									Z-01
Propene	ND	0.80									
Styrene	ND	0.020									

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	Limits	RPD	Limit	

Batch B356276 - TO-15 Prep
Blank (B356276-BLK1)

Prepared & Analyzed: 10/23/23

1,1,2,2-Tetrachloroethane	ND	0.020
Tetrachloroethylene	ND	0.020
Tetrahydrofuran	ND	0.20
Toluene	ND	0.020
1,2,4-Trichlorobenzene	ND	0.020
1,1,1-Trichloroethane	ND	0.020
1,1,2-Trichloroethane	ND	0.020
Trichloroethylene	ND	0.020
Trichlorofluoromethane (Freon 11)	ND	0.080
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.080
1,2,4-Trimethylbenzene	ND	0.020
1,3,5-Trimethylbenzene	ND	0.020
Vinyl Acetate	ND	0.40
Vinyl Chloride	ND	0.020
m&p-Xylene	ND	0.040
o-Xylene	ND	0.020

<i>Surrogate: 4-Bromofluorobenzene (1)</i>	<i>7.56</i>	<i>8.00</i>	<i>94.5</i>	<i>70-130</i>
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LCS (B356276-BS1)

Prepared & Analyzed: 10/23/23

Acetone	3.63	5.00	72.5	70-130	L-03
Benzene	4.03	5.00	80.6	70-130	
Benzyl chloride	3.35	5.00	67.0 *	70-130	
Bromodichloromethane	4.08	5.00	81.7	70-130	
Bromoform	4.37	5.00	87.5	70-130	
Bromomethane	3.57	5.00	71.4	70-130	
1,3-Butadiene	3.91	5.00	78.2	70-130	
2-Butanone (MEK)	4.29	5.00	85.9	70-130	
Carbon Disulfide	4.47	5.00	89.5	70-130	
Carbon Tetrachloride	4.40	5.00	88.0	70-130	
Chlorobenzene	4.07	5.00	81.4	70-130	L-03
Chloroethane	3.57	5.00	71.3	70-130	
Chloroform	3.89	5.00	77.8	70-130	
Chloromethane	3.71	5.00	74.2	70-130	
Cyclohexane	4.39	5.00	87.8	70-130	
Dibromochloromethane	4.62	5.00	92.4	70-130	
1,2-Dibromoethane (EDB)	4.23	5.00	84.6	70-130	
1,2-Dichlorobenzene	4.27	5.00	85.4	70-130	
1,3-Dichlorobenzene	4.41	5.00	88.1	70-130	
1,4-Dichlorobenzene	4.23	5.00	84.6	70-130	
Dichlorodifluoromethane (Freon 12)	3.46	5.00	69.2 *	70-130	L-03
1,1-Dichloroethane	3.97	5.00	79.4	70-130	
1,2-Dichloroethane	4.30	5.00	86.1	70-130	
1,1-Dichloroethylene	4.37	5.00	87.5	70-130	
cis-1,2-Dichloroethylene	4.04	5.00	80.9	70-130	
trans-1,2-Dichloroethylene	4.17	5.00	83.4	70-130	L-03
1,2-Dichloropropane	4.06	5.00	81.1	70-130	

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QUALITY CONTROL
Air Toxics by EPA Compendium Methods - Quality Control

Analyte	ppbv		ug/m3		Spike Level	Source	%REC	%REC	RPD	RPD	Flag/Qual
	Results	RL	Results	RL	ppbv	Result	%REC	Limits	RPD	Limit	
Batch B356276 - TO-15 Prep											
LCS (B356276-BS1)					Prepared & Analyzed: 10/23/23						
cis-1,3-Dichloropropene	4.41				5.00		88.1	70-130			
trans-1,3-Dichloropropene	4.91				5.00		98.2	70-130			
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	3.53				5.00		70.5	70-130			
1,4-Dioxane	3.74				5.00		74.9	70-130			
Ethanol	3.12				5.00		62.3	* 70-130			L-03
Ethyl Acetate	4.03				5.00		80.6	70-130			
Ethylbenzene	4.38				5.00		87.6	70-130			
4-Ethyltoluene	4.74				5.00		94.8	70-130			
Heptane	4.58				5.00		91.6	70-130			
Hexachlorobutadiene	4.60				4.25		108	70-130			
Hexane	4.76				5.00		95.1	70-130			
2-Hexanone (MBK)	4.73				5.00		94.5	70-130			
Isopropanol	3.15				5.00		63.0	* 70-130			L-03
Methyl tert-Butyl Ether (MTBE)	4.32				5.00		86.4	70-130			
Methylene Chloride	4.08				5.00		81.5	70-130			
4-Methyl-2-pentanone (MIBK)	4.77				5.00		95.3	70-130			
Naphthalene	3.96				3.68		107	70-130			Z-01
Propene	3.88				5.00		77.6	70-130			
Styrene	4.64				5.00		92.8	70-130			
1,1,2,2-Tetrachloroethane	3.91				5.00		78.2	70-130			
Tetrachloroethylene	4.15				5.00		83.0	70-130			
Tetrahydrofuran	4.81				5.00		96.1	70-130			
Toluene	4.53				5.00		90.6	70-130			
1,2,4-Trichlorobenzene	3.41				3.90		87.4	70-130			
1,1,1-Trichloroethane	4.19				5.00		83.9	70-130			
1,1,2-Trichloroethane	4.24				5.00		84.9	70-130			
Trichloroethylene	4.09				5.00		81.8	70-130			
Trichlorofluoromethane (Freon 11)	3.90				5.00		77.9	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	4.14				5.00		82.7	70-130			
1,2,4-Trimethylbenzene	4.75				5.00		94.9	70-130			
1,3,5-Trimethylbenzene	4.82				5.00		96.5	70-130			
Vinyl Acetate	5.00				5.00		100	70-130			
Vinyl Chloride	3.76				5.00		75.3	70-130			
m&p-Xylene	9.55				10.0		95.5	70-130			
o-Xylene	4.71				5.00		94.1	70-130			
Surrogate: 4-Bromofluorobenzene (1)	7.77				8.00		97.1	70-130			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
L-03	Laboratory fortified blank/laboratory control sample recovery is outside of control limits. Reported value for this compound is likely to be biased on the low side.
Z-01	Calibrations RSD for this compound is >30% but <40%.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (S085380-ICV1)			Lab File ID: J23A090036.D			Analyzed: 04/01/23 05:53			
Bromochloromethane (1)	298104	2.788	289065	2.788	103	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	850179	3.418	804638	3.418	106	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	747035	5.036	717694	5.036	104	60 - 140	0.0000	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY
EPA TO-15

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Calibration Check (S095401-CCV1)			Lab File ID: J23A296004.D			Analyzed: 10/23/23 10:42			
Bromochloromethane (1)	400230	2.807				60 - 140		+/-0.50	
1,4-Difluorobenzene (1)	1041722	3.429				60 - 140		+/-0.50	
Chlorobenzene-d5 (1)	895624	5.042				60 - 140		+/-0.50	
LCS (B356276-BS1)			Lab File ID: J23A296005.D			Analyzed: 10/23/23 11:07			
Bromochloromethane (1)	390527	2.807	400230	2.807	98	60 - 140	0.0000	+/-0.50	
1,4-Difluorobenzene (1)	1030681	3.429	1041722	3.429	99	60 - 140	0.0000	+/-0.50	
Chlorobenzene-d5 (1)	880366	5.041	895624	5.042	98	60 - 140	-0.0010	+/-0.50	
Blank (B356276-BLK1)			Lab File ID: J23A296008.D			Analyzed: 10/23/23 12:35			
Bromochloromethane (1)	361515	2.787	400230	2.807	90	60 - 140	-0.0200	+/-0.50	
1,4-Difluorobenzene (1)	929520	3.417	1041722	3.429	89	60 - 140	-0.0120	+/-0.50	
Chlorobenzene-d5 (1)	786105	5.037	895624	5.042	88	60 - 140	-0.0050	+/-0.50	
SVE Influent (23J2189-02)			Lab File ID: J23A296031.D			Analyzed: 10/23/23 22:54			
Bromochloromethane (1)	342108	2.787	400230	2.807	85	60 - 140	-0.0200	+/-0.50	
1,4-Difluorobenzene (1)	838607	3.418	1041722	3.429	81	60 - 140	-0.0110	+/-0.50	
Chlorobenzene-d5 (1)	711840	5.033	895624	5.042	79	60 - 140	-0.0090	+/-0.50	
SVE Effluent (23J2189-01)			Lab File ID: J23A296032.D			Analyzed: 10/23/23 23:18			
Bromochloromethane (1)	366299	2.792	400230	2.807	92	60 - 140	-0.0150	+/-0.50	
1,4-Difluorobenzene (1)	875841	3.423	1041722	3.429	84	60 - 140	-0.0060	+/-0.50	
Chlorobenzene-d5 (1)	749188	5.038	895624	5.042	84	60 - 140	-0.0040	+/-0.50	
SVE Effluent (23J2189-01RE1)			Lab File ID: J23A296033.D			Analyzed: 10/23/23 23:42			
Bromochloromethane (1)	355702	2.792	400230	2.807	89	60 - 140	-0.0150	+/-0.50	
1,4-Difluorobenzene (1)	842619	3.422	1041722	3.429	81	60 - 140	-0.0070	+/-0.50	
Chlorobenzene-d5 (1)	715021	5.037	895624	5.042	80	60 - 140	-0.0050	+/-0.50	

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CONTINUING CALIBRATION CHECK

EPA TO-15

S095401-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Acetone	A	5.00	4.04	1.034114	0.8360872		-19.1	30
Benzene	A	5.00	4.24	0.8123645	0.6892388		-15.2	30
Benzyl chloride	L	5.00	3.82	0.5056852	0.5764115		-23.7	30
Bromodichloromethane	A	5.00	4.35	0.6094342	0.5298703		-13.1	30
Bromoform	A	5.00	4.46	0.4573839	0.4084285		-10.7	30
Bromomethane	A	5.00	3.71	0.6761959	0.5013517		-25.9	30
1,3-Butadiene	A	5.00	4.16	0.5092257	0.4241441		-16.7	30
2-Butanone (MEK)	A	5.00	4.59	1.148647	1.055013		-8.2	30
Carbon Disulfide	A	5.00	4.48	2.001154	1.795148		-10.3	30
Carbon Tetrachloride	A	5.00	4.10	0.5037067	0.413119		-18.0	30
Chlorobenzene	A	5.00	4.28	0.7622773	0.6527436		-14.4	30
Chloroethane	A	5.00	3.70	0.4202137	0.3110691		-26.0	30
Chloroform	A	5.00	4.06	1.577837	1.281615		-18.8	30
Chloromethane	A	5.00	3.96	0.5966374	0.4722724		-20.8	30
Cyclohexane	A	5.00	4.56	0.3246406	0.2959638		-8.8	30
Dibromochloromethane	A	5.00	4.80	0.5189836	0.4983573		-4.0	30
1,2-Dibromoethane (EDB)	A	5.00	4.63	0.4960864	0.4590033		-7.5	30
1,2-Dichlorobenzene	A	5.00	4.77	0.4911951	0.4682429		-4.7	30
1,3-Dichlorobenzene	A	5.00	4.77	0.5456808	0.5208078		-4.6	30
1,4-Dichlorobenzene	A	5.00	4.60	0.5309926	0.4887194		-8.0	30
Dichlorodifluoromethane (Freon 12)	A	5.00	3.66	1.809285	1.32605		-26.7	30
1,1-Dichloroethane	A	5.00	4.14	1.317427	1.090133		-17.3	30
1,2-Dichloroethane	A	5.00	4.38	0.9730911	0.8534293		-12.3	30
1,1-Dichloroethylene	A	5.00	4.63	1.146845	1.061038		-7.5	30
cis-1,2-Dichloroethylene	A	5.00	4.31	0.9524103	0.8210239		-13.8	30
trans-1,2-Dichloroethylene	A	5.00	4.16	1.02979	0.8560957		-16.9	30
1,2-Dichloropropane	A	5.00	4.33	0.3033695	0.2626636		-13.4	30
cis-1,3-Dichloropropene	A	5.00	4.80	0.4042769	0.3878455		-4.1	30
trans-1,3-Dichloropropene	A	5.00	5.33	0.3279415	0.3492924		6.5	30
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	A	5.00	3.95	1.964888	1.552279		-21.0	30
1,4-Dioxane	A	5.00	4.32	0.1624784	0.1404536		-13.6	30
Ethanol	A	5.00	4.65	0.1724202	0.1603438		-7.0	30
Ethyl Acetate	A	5.00	4.87	0.2040016	0.1987057		-2.6	30
Ethylbenzene	A	5.00	4.70	1.293794	1.2171		-5.9	30
4-Ethyltoluene	A	5.00	5.01	1.173601	1.17564		0.2	30
Heptane	A	5.00	4.71	0.2390228	0.2251687		-5.8	30
Hexachlorobutadiene	A	5.00	5.53	0.2261563	0.2502175		10.6	30
Hexane	L	5.00	4.70	0.6738496	0.6374335		-5.9	30

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CONTINUING CALIBRATION CHECK

EPA TO-15

S095401-CCV1

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
2-Hexanone (MBK)	A	5.00	5.98	0.4320676	0.5166865		19.6	30
Isopropanol	A	5.00	4.23	1.163166	0.9835784		-15.4	30
Methyl tert-Butyl Ether (MTBE)	A	5.00	4.41	1.752887	1.545711		-11.8	30
Methylene Chloride	A	5.00	4.33	0.8161184	0.7070694		-13.4	30
4-Methyl-2-pentanone (MIBK)	A	5.00	5.44	0.1991676	0.2167027		8.8	30
Naphthalene	A	5.00	5.12	0.4140914	0.4237743		2.3	30
Propene	A	5.00	4.06	0.3783566	0.3076191		-18.7	30
Styrene	A	5.00	5.35	0.6193387	0.6628049		7.0	30
1,1,2,2-Tetrachloroethane	A	5.00	4.31	0.7875453	0.6794369		-13.7	30
Tetrachloroethylene	A	5.00	4.35	0.4061033	0.3531268		-13.0	30
Tetrahydrofuran	A	5.00	4.86	0.5602263	0.5439632		-2.9	30
Toluene	A	5.00	4.74	0.9952737	0.9433066		-5.2	30
1,2,4-Trichlorobenzene	A	5.00	4.31	0.1951236	0.1682617		-13.8	30
1,1,1-Trichloroethane	A	5.00	4.66	0.5148362	0.4800605		-6.8	30
1,1,2-Trichloroethane	A	5.00	4.45	0.3494055	0.3112467		-10.9	30
Trichloroethylene	A	5.00	4.36	0.3469588	0.3022196		-12.9	30
Trichlorofluoromethane (Freon 11)	A	5.00	4.13	1.832227	1.514081		-17.4	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	5.00	4.43	1.363757	1.208213		-11.4	30
1,2,4-Trimethylbenzene	A	5.00	5.23	0.9035781	0.9456165		4.7	30
1,3,5-Trimethylbenzene	A	5.00	5.25	0.9651619	1.013409		5.0	30
Vinyl Acetate	A	5.00	4.54	1.160867	1.053522		-9.2	30
Vinyl Chloride	A	5.00	3.98	0.7330867	0.5839123		-20.3	30
m&p-Xylene	A	10.0	10.1	1.010218	1.020986		1.1	30
o-Xylene	A	5.00	5.01	0.9862305	0.9878395		0.2	30

Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

* Values outside of QC limits

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CERTIFICATIONS
Certified Analyses included in this Report

Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Acetone	AIHA,NY,ME,NH
Benzene	AIHA,FL,NJ,NY,ME,NH,VA
Benzyl chloride	AIHA,FL,NJ,NY,ME,NH,VA
Bromodichloromethane	AIHA,NJ,NY,ME,NH,VA
Bromoform	AIHA,NJ,NY,ME,NH,VA
Bromomethane	AIHA,FL,NJ,NY,ME,NH
1,3-Butadiene	AIHA,NJ,NY,ME,NH,VA
2-Butanone (MEK)	AIHA,FL,NJ,NY,ME,NH,VA
Carbon Disulfide	AIHA,NJ,NY,ME,NH,VA
Carbon Tetrachloride	AIHA,FL,NJ,NY,ME,NH,VA
Chlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Chloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Chloroform	AIHA,FL,NJ,NY,ME,NH,VA
Chloromethane	AIHA,FL,NJ,NY,ME,NH,VA
Cyclohexane	AIHA,NJ,NY,ME,NH,VA
Dibromochloromethane	AIHA,NY,ME,NH
1,2-Dibromoethane (EDB)	AIHA,NJ,NY,ME,NH
1,2-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
1,3-Dichlorobenzene	AIHA,NJ,NY,ME,NH
1,4-Dichlorobenzene	AIHA,FL,NJ,NY,ME,NH,VA
Dichlorodifluoromethane (Freon 12)	AIHA,NY,ME,NH
1,1-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,2-Dichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1-Dichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,2-Dichloroethylene	AIHA,FL,NY,ME,NH,VA
trans-1,2-Dichloroethylene	AIHA,NJ,NY,ME,NH,VA
1,2-Dichloropropane	AIHA,FL,NJ,NY,ME,NH,VA
cis-1,3-Dichloropropene	AIHA,FL,NJ,NY,ME,NH,VA
trans-1,3-Dichloropropene	AIHA,NY,ME,NH
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	AIHA,NJ,NY,ME,NH,VA
1,4-Dioxane	AIHA,NJ,NY,ME,NH,VA
Ethanol	AIHA
Ethyl Acetate	AIHA
Ethylbenzene	AIHA,FL,NJ,NY,ME,NH,VA
4-Ethyltoluene	AIHA
Heptane	AIHA,NJ,NY,ME,NH,VA
Hexachlorobutadiene	AIHA,NJ,NY,ME,NH,VA
Hexane	AIHA,FL,NJ,NY,ME,NH,VA
2-Hexanone (MBK)	AIHA
Isopropanol	AIHA,NY,ME,NH
Methyl tert-Butyl Ether (MTBE)	AIHA,FL,NJ,NY,ME,NH,VA
Methylene Chloride	AIHA,FL,NJ,NY,ME,NH,VA
4-Methyl-2-pentanone (MIBK)	AIHA,FL,NJ,NY,ME,NH
Naphthalene	NY,ME,NH
Propene	AIHA
Styrene	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2,2-Tetrachloroethane	AIHA,FL,NJ,NY,ME,NH,VA

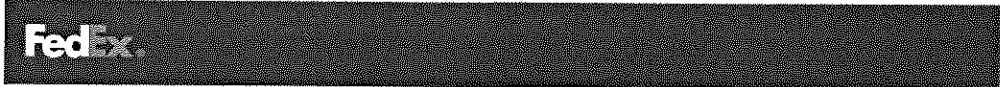
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CERTIFICATIONS
Certified Analyses included in this Report

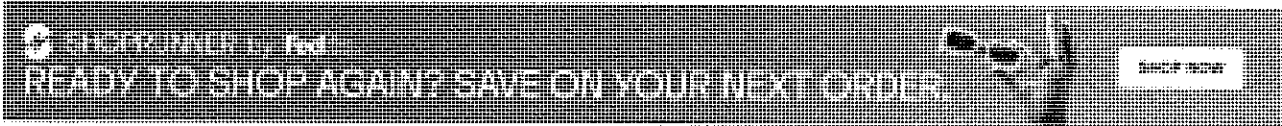
Analyte	Certifications
<i>EPA TO-15 in Air</i>	
Tetrachloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Tetrahydrofuran	AIHA
Toluene	AIHA,FL,NJ,NY,ME,NH,VA
1,2,4-Trichlorobenzene	AIHA,NJ,NY,ME,NH,VA
1,1,1-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
1,1,2-Trichloroethane	AIHA,FL,NJ,NY,ME,NH,VA
Trichloroethylene	AIHA,FL,NJ,NY,ME,NH,VA
Trichlorofluoromethane (Freon 11)	AIHA,NY,ME,NH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	AIHA,NJ,NY,ME,NH,VA
1,2,4-Trimethylbenzene	AIHA,NJ,NY,ME,NH
1,3,5-Trimethylbenzene	AIHA,NJ,NY,ME,NH
Vinyl Acetate	AIHA,FL,NJ,NY,ME,NH,VA
Vinyl Chloride	AIHA,FL,NJ,NY,ME,NH,VA
m&p-Xylene	AIHA,FL,NJ,NY,ME,NH,VA
o-Xylene	AIHA,FL,NJ,NY,ME,NH,VA

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC - ISO 17025:2017	100033	03/1/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
NJ	New Jersey DEP	MA007 NELAP	06/30/2024
FL	Florida Department of Health	E871027 NELAP	06/30/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2023



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TRACKING ID

773628280967

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10/13/23 4:18 PM

IN TRANSIT

WINDSOR, CT

10/16/23 4:27 AM

OUT FOR DELIVERY

WINDSOR, CT

10/16/23 4:31 AM

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East Longmeadow, MA US

Delivered

10/16/23 at 10:48 AM

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Shipment facts

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	DC#_Title: ENV-FRM-ELON-0009 v04_Air Sample Receiving Checklist
	Effective Date: 07/13/2023

Log In Back-Sheet

Client Enviro Trac
 Project Front St 001
 MCP/RCP Required —
 Deliverable Package Requirement —
 Location Westburg, NY
 PWSID# (When Applicable) —
 Arrival Method FEDEX 77362828 0967
 Received By / Date / Time TPH 10-16-23 1048
 Back-Sheet By / Date / Time TPH 10-16-23 1215
 Temperature Method — # —
 Temp $\leq 6^{\circ}\text{C}$ ☐ Actual Temperature —
 Rush Samples: Yes ☒ No — Notify —
 Short Hold: Yes ☒ No — Notify —

Notes regarding Samples/COC outside of SOP:

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy)
 Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☐	☒
Received in Cooler	☐	☒
Custody Seal: DATE TIME	☐	☒
COC Relinquished	☒	☐
COC/Samples Labels Agree	☒	☐
All Samples in Good Condition	☒	☐
Samples Received within Holding Time	☒	☐
Is there enough Volume	☒	☐
Proper Media/Container Used	☒	☐
Individually Certified Cans	☒	☒
Trip Blanks	☐	☒
COC Legible	☒	☐
COC Included: (Check all included)		
Client ☒	Analysis ☒	Sampler Name ☒
Project ☒	IDs ☒	Collection Date/Time ☒

Container	#	Size	Regulator	Duration	Accessories			
Summa Cans	2	3L	2	15min	Nut/Ferrule		IC Train	
Tedlar Bags					Tubing			
TO-17 Tubes					T-Connector		Shipping Charges	
Radiello					Syringe			
Pufs/ TO-11					Tedlar			

Can #'s	5	10	15	Regs #'s	5	10	15
1 2419	6	11	16	1 4675	6	11	16
2 2764	7	12	17	2 4676	7	12	17
3	8	13	18	3	8	13	18
4	9	14	19	4	9	14	19
Unused Media	4	9	14	Pufs/TO-17's	5	10	15
1	5	10	15	1	6	11	16
2	6	11	16	2	7	12	17
3	7	12	17	3	8	13	18
4	8	13	18	4	9	14	19

Appendix C
AS/SVE System Repair Photographs

Frost Street Sites
October 2023
AS-1, AS-2, AS-3 Piping Repair Photographs



October 3, 2023
Test pits to find location of air leaks



October 3, 2023
Test pits to find location of air leaks



October 3, 2023
Test pits to find location of air leaks



October 3, 2023
Test pits to find location of air leaks



October 3, 2023
Test pits to find location of air leaks



October 4, 2023
Excavation for new pipe

Frost Street Sites
October 2023
AS-1, AS-2, AS-3 Piping Repair Photographs



October 4, 2023
Excavation for new pipe



October 4, 2023
Excavation for new pipe



October 4, 2023
Excavation for new pipe



October 4, 2023
Excavation for new pipe



October 4, 2023
Excavation for new pipe



October 4, 2023
Excavation for new pipe

Frost Street Sites
October 2023
AS-1, AS-2, AS-3 Piping Repair Photographs



October 4, 2023
Excavation for new pipe



October 5, 2023
New pipes installed above existing



October 5, 2023
New pipes installed above existing



October 5, 2023
New pipes installed above existing



October 5, 2023
New pipes' connection at system



October 12, 2023
Backfilled excavation and restored asphalt

**Frost Street Sites
October 2023
AS-1, AS-2, AS-3 Piping Repair Photographs**



October 12, 2023
Backfilled excavation and restored asphalt



October 12, 2023
Backfilled excavation and restored asphalt