1233 Silas Deane Highway | Wethersfield, Connecticut 06109 | Telephone 860-665-1140 | Fax 860-665-9445 | www.ensafe.com

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

July 10, 2018

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

Re: Progress Report: June 2018
Frost Street Sites: Site ID #s 1-30043 I, L, M
New Cassel Industrial Area, Westbury, New York

Dear Mr. DeCandia:

EnSafe Inc. is pleased to submit this Progress Report for the Frost Street Sites (Site ID #s 1-30043 I, L, M) for work completed in June 2018.

Soil Vapor Extraction (SVE)/Air Sparge (AS) System Operation and Maintenance (O&M) (OU1)

- Operations continued this month, per the O&M Manual. During periodic O&M visits, system parameters were logged on dedicated O&M forms (**Appendix A**).
- Quantitative sampling of the SVE system granular activated carbon influent and effluent air flow was conducted on June 7, 2018, using Summa canisters. These samples were obtained by EnviroTrac, submitted to Phoenix Environmental Laboratories, and analyzed by Method TO-15. Results are included in **Appendix B**.
    - Photoionization detector readings and influent concentrations of Frost Street-related contaminants of concern (tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, and vinyl chloride [26,975 µg/m^3]) continue to indicate significant mass extraction.

Frost Street Sites
Effluent Compliance

System Flow Rate = 800 ft^3/m

Compound	Annual Mass Emission Limit (lbs/year)	Allowable Continuous Annual Concentration ($\mu g/m^3$)	June 2018 Effluent Concentration ($\mu g/m^3$)
Trichloroethene	500	19,000	18.1
Tetrachloroethene	1,000	38,000	19.5
Vinyl Chloride	100	3,800	ND
Cis-1,2-Dichloroethene	100	3,800	70.5

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.

Groundwater Extraction/Hydraulic Containment System Installation (OU2)

As stated in the May 2018 Progress Report, the pump test is complete; the pump test data is currently being analyzed and a report summarizing the results and recommended pumping configuration(s) is forthcoming.

Construction of the in-vault treatment for the pH treatment cell was completed on May 31, 2018. As shown in the attached summary report (**Appendix C**), the cell was filled with approximately 50 gallons of PHIX material and the system was made operational at design flow rates on June 15, 2018. Troubleshooting occurred throughout the month to increase the treatment capacity of the cell; additional PHIX material has been ordered and will be used to replace what has compacted/washed out during this process. A revised schedule is provided in **Appendix D**, which reflects the startup date change.

Quarterly/Annual Groundwater Monitoring

- The fourth quarter 2017 groundwater sampling report was submitted to NYSDEC on May 9, 2018.
- The May 2018 Progress Report incorrectly stated that the first quarter 2018 report was submitted to NYSDEC on May 9, 2018; this report is in progress and will be submitted to NYSDEC once complete.
- The second quarter 2018 groundwater sampling event occurred June 26 through 28, 2018; results will be submitted to NYSDEC 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.

Copies: A. Tamuno, Esq., NYSDEC *Via email to amtamuno@gw.dec.state.ny.us*
C. Bethoney, NYSDOH *Via email to charlotte.bethoney@health.ny.gov*
J. Nealon, NYSDOH *Via email to jacquelyn.nealon@health.ny.gov*
R. Putnam, NCDOH *Via email to rputnam@nassaucountyny.gov*
T. Mongelli, U.S. EPA *Via email to Mongelli.Thomas@epa.gov*
T. Pupilla, Sanders Equities *Via email to tpupilla@sandersequities.com*
K. Maldonado, Esq. *Via email to kevinmaldonado64@yahoo.com*
J. Privitera, Esq. *Via email to privitera@mltw.com*
P. Coop, EnSafe *Via email to pcoop@ensafe.com*
J. Wilkinson, Envirotrac *Via email to jamesw@envirotrac.com*

Appendix A

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: 7-Jun
Weather / Temp: Cloudy / 70 DEG
Technician / Operator: JW

Arrival Time: 10:00
Departure Time: 11:30

System Status					
	Arrival	Departure		Arrival	Departure
SVE Blower 1 (ON/OFF)	OFF	OFF	Sensaphone (ON/OFF)	ON	ON
SVE Blower 2 (ON/OFF)	ON	ON	Surge Protection (ON/OFF)	ON	ON
AS Compressor 1 (ON/OFF)	OFF	OFF	Lightning Protection (White/Black)	White	White
AS Compressor 2 (ON/OFF)	ON	ON			

Soil Vapor Extraction System				
Blower Air Velocity/Flow Rate (fpm)/(cfm)	4700	923	Blower 1 Total Runtime (hrs)	50,724.6
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	50,538.1
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)	43		VGAC-1 Influent PID (ppm)	4.2
VGAC-1 Effluent Vacuum ("H2O)	45		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	40		VGAC-2 Influent PID (ppm)	4.2
VGAC-2 Effluent Vacuum ("H2O)	45		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Pressure ("H2O)	50		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Pressure ("H2O)	60		VGAC-3 Effluent PID (ppm)	0.0
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	9			
Transfer Pump Total Runtime (hrs)	25,033.0		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	8.6	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	40	4200	92	0.0
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	46	4500	98	2.5	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	40	3200	70	0.0
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	38	4800	105	3.2	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	40	6500	142	14.5
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	36	4300	94	0.0	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	40	3300	72	0.0

Air Sparge System			
Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	91
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	182
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	27,177
Manifold Regulator Pressure (psi)	70		

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

Notes, Comments & Observations:

Collected monthly samples.

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

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

Date: 14-Jun
Weather / Temp: Clear / 75 DEG
Technician / Operator: JW

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

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)	4600	903	Blower 1 Total Runtime (hrs)	50,808.6
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	50,622.9
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)	43		VGAC-1 Influent PID (ppm)	4.1
VGAC-1 Effluent Vacuum ("H2O)	45		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	40		VGAC-2 Influent PID (ppm)	4.1
VGAC-2 Effluent Vacuum ("H2O)	45		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Pressure ("H2O)	51		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Pressure ("H2O)	60		VGAC-3 Effluent PID (ppm)	0.0
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	9			
Transfer Pump Total Runtime (hrs)	25,033.0		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	6500	142		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	36	4200	92	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	46	4000	87		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	36	3000	65	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	38	4800	105		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	36	6000	131	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	36	4300	94		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	36	3000	65	

Air Sparge System

Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	90
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	193
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	27,345
Manifold Regulator Pressure (psi)	70		

AS Manifold Legs - Pressure/Flow Rate

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

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: 22-Jun
Weather / Temp: Clear / 75 DEG
Technician / Operator: JW

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

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)	4600	903	Blower 1 Total Runtime (hrs)	50,904.6
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	50,719.4
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)	43		VGAC-1 Influent PID (ppm)	4.0
VGAC-1 Effluent Vacuum ("H2O)	45		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	40		VGAC-2 Influent PID (ppm)	4.0
VGAC-2 Effluent Vacuum ("H2O)	45		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Pressure ("H2O)	51		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Pressure ("H2O)	60		VGAC-3 Effluent PID (ppm)	0.0
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	9			
Transfer Pump Total Runtime (hrs)	25,033.0		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	6500	142		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	36	4200	92	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	46	4000	87		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	36	3000	65	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	38	4500	98		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	36	6000	131	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	36	4800	105		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	36	3000	65	

Air Sparge System

Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	93
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	192
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	27,537
Manifold Regulator Pressure (psi)	75		

AS Manifold Legs - Pressure/Flow Rate

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

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: 22-Jun
Weather / Temp: Clear / 80 DEG
Technician / Operator: JW

Arrival Time: 13:00
Departure Time: 14:00

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)	OFF	ON			

Soil Vapor Extraction System

Blower Air Velocity/Flow Rate (fpm)/(cfm)	4600	903	Blower 1 Total Runtime (hrs)	50,990.0
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	50,803.6
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)	45		VGAC-1 Influent PID (ppm)	2.6
VGAC-1 Effluent Vacuum ("H2O)	45		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	40		VGAC-2 Influent PID (ppm)	2.6
VGAC-2 Effluent Vacuum ("H2O)	45		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Pressure ("H2O)	50		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Pressure ("H2O)	60		VGAC-3 Effluent PID (ppm)	0.0
VGAC-3 Influent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	9			
Transfer Pump Total Runtime (hrs)	25,033.0		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	6500	142		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	36	4200	92	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	46	4000	87		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	36	3000	65	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	38	4500	98		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	36	6000	131	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	36	4800	105		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	36	3000	65	

Air Sparge System

Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	92
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	200
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	27,615
Manifold Regulator Pressure (psi)	75		

AS Manifold Legs - Pressure/Flow Rate

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

Notes, Comments & Observations:

Restarted AS Compressor after GW sampling event.

Appendix B

SVE System Influent/Effluent Sampling (TO-15)

Laboratory Analytical Results

Monday, June 18, 2018

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

Project ID: ENSAFE-WESTBURY
Sample ID#s: CA67808 - CA67809

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,

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

June 18, 2018

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

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	JW	06/07/18	10:46
Location Code:	ENVIROTR	Received by:	SW	06/11/18	15:49
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	754				

Laboratory Data

SDG ID: GCA67808
Phoenix ID: CA67808

Project ID: ENSAFE-WESTBURY
Client ID: SVE EFFLUENT

Parameter	ppbv Result		ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Volatiles (TO15)									
1,1,1,2-Tetrachloroethane	ND		*0.146*	ND	*1.00*	06/13/18	KCA	1	1
1,1,1-Trichloroethane	ND		*0.183*	ND	*1.00*	06/13/18	KCA	1	
1,1,2,2-Tetrachloroethane	ND		*0.146*	ND	*1.00*	06/13/18	KCA	1	
1,1,2-Trichloroethane	ND		*0.183*	ND	*1.00*	06/13/18	KCA	1	
1,1-Dichloroethane	ND		*0.247*	ND	*1.00*	06/13/18	KCA	1	
1,1-Dichloroethene	0.078		*0.051*	0.31	*0.20*	06/13/18	KCA	1	
1,2,4-Trichlorobenzene	ND		*0.135*	ND	*1.00*	06/13/18	KCA	1	
1,2,4-Trimethylbenzene	ND		*0.204*	ND	*1.00*	06/13/18	KCA	1	
1,2-Dibromoethane(EDB)	ND		*0.130*	ND	*1.00*	06/13/18	KCA	1	
1,2-Dichlorobenzene	ND		*0.166*	ND	*1.00*	06/13/18	KCA	1	
1,2-Dichloroethane	ND		*0.247*	ND	*1.00*	06/13/18	KCA	1	
1,2-dichloropropane	ND		*0.217*	ND	*1.00*	06/13/18	KCA	1	
1,2-Dichlorotetrafluoroethane	ND		*0.143*	ND	*1.00*	06/13/18	KCA	1	
1,3,5-Trimethylbenzene	ND		*0.204*	ND	*1.00*	06/13/18	KCA	1	
1,3-Butadiene	ND		*0.452*	ND	*1.00*	06/13/18	KCA	1	
1,3-Dichlorobenzene	ND		*0.166*	ND	*1.00*	06/13/18	KCA	1	
1,4-Dichlorobenzene	ND		*0.166*	ND	*1.00*	06/13/18	KCA	1	
1,4-Dioxane	ND		*0.278*	ND	*1.00*	06/13/18	KCA	1	
2-Hexanone(MBK)	ND		*0.244*	ND	*1.00*	06/13/18	KCA	1	1
4-Ethyltoluene	ND		*0.204*	ND	*1.00*	06/13/18	KCA	1	1
4-Isopropyltoluene	ND		*0.182*	ND	*1.00*	06/13/18	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND		*0.244*	ND	*1.00*	06/13/18	KCA	1	
Acetone	1.17	S	*0.421*	2.78	*1.00*	06/13/18	KCA	1	
Acrylonitrile	ND		*0.461*	ND	*1.00*	06/13/18	KCA	1	
Benzene	ND		*0.313*	ND	*1.00*	06/13/18	KCA	1	
Benzyl chloride	ND		*0.193*	ND	*1.00*	06/13/18	KCA	1	

Project ID: ENSAFE-WESTBURY
Client ID: SVE EFFLUENT

Phoenix I.D.: CA67808

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	ND	*1.00*	06/13/18	KCA	1	
Bromoform	ND	*0.097*	ND	*1.00*	06/13/18	KCA	1	
Bromomethane	ND	*0.258*	ND	*1.00*	06/13/18	KCA	1	
Carbon Disulfide	ND	*0.321*	ND	*1.00*	06/13/18	KCA	1	
Carbon Tetrachloride	ND	*0.032*	ND	*0.20*	06/13/18	KCA	1	
Chlorobenzene	ND	*0.217*	ND	*1.00*	06/13/18	KCA	1	
Chloroethane	ND	*0.379*	ND	*1.00*	06/13/18	KCA	1	
Chloroform	ND	*0.205*	ND	*1.00*	06/13/18	KCA	1	
Chloromethane	ND	*0.485*	ND	*1.00*	06/13/18	KCA	1	
Cis-1,2-Dichloroethene	17.8	*0.051*	70.5	*0.20*	06/13/18	KCA	1	
cis-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	06/13/18	KCA	1	
Cyclohexane	ND	*0.291*	ND	*1.00*	06/13/18	KCA	1	
Dibromochloromethane	ND	*0.118*	ND	*1.00*	06/13/18	KCA	1	
Dichlorodifluoromethane	0.611	*0.202*	3.02	*1.00*	06/13/18	KCA	1	
Ethanol	0.666	*0.531*	1.25	*1.00*	06/13/18	KCA	1	1
Ethyl acetate	ND	*0.278*	ND	*1.00*	06/13/18	KCA	1	1
Ethylbenzene	ND	*0.230*	ND	*1.00*	06/13/18	KCA	1	
Heptane	ND	*0.244*	ND	*1.00*	06/13/18	KCA	1	
Hexachlorobutadiene	ND	*0.094*	ND	*1.00*	06/13/18	KCA	1	
Hexane	ND	*0.284*	ND	*1.00*	06/13/18	KCA	1	
Isopropylalcohol	ND	*0.407*	ND	*1.00*	06/13/18	KCA	1	
Isopropylbenzene	ND	*0.204*	ND	*1.00*	06/13/18	KCA	1	
m,p-Xylene	ND	*0.230*	ND	*1.00*	06/13/18	KCA	1	
Methyl Ethyl Ketone	ND	*0.339*	ND	*1.00*	06/13/18	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	ND	*1.00*	06/13/18	KCA	1	
Methylene Chloride	ND	*0.864*	ND	*3.00*	06/13/18	KCA	1	
n-Butylbenzene	ND	*0.182*	ND	*1.00*	06/13/18	KCA	1	1
o-Xylene	ND	*0.230*	ND	*1.00*	06/13/18	KCA	1	
Propylene	ND	*0.581*	ND	*1.00*	06/13/18	KCA	1	1
sec-Butylbenzene	ND	*0.182*	ND	*1.00*	06/13/18	KCA	1	1
Styrene	ND	*0.235*	ND	*1.00*	06/13/18	KCA	1	
Tetrachloroethene	2.88	*0.037*	19.5	*0.25*	06/13/18	KCA	1	
Tetrahydrofuran	ND	*0.339*	ND	*1.00*	06/13/18	KCA	1	1
Toluene	ND	*0.266*	ND	*1.00*	06/13/18	KCA	1	
Trans-1,2-Dichloroethene	0.367	*0.252*	1.45	*1.00*	06/13/18	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	06/13/18	KCA	1	
Trichloroethene	3.37	*0.037*	18.1	*0.20*	06/13/18	KCA	1	
Trichlorofluoromethane	0.390	*0.178*	2.19	*1.00*	06/13/18	KCA	1	
Trichlorotrifluoroethane	0.197	*0.131*	1.51	*1.00*	06/13/18	KCA	1	
Vinyl Chloride	ND	*0.078*	ND	*0.20*	06/13/18	KCA	1	
QA/QC Surrogates								
% Bromofluorobenzene	95	*%*	95	*%*	06/13/18	KCA	1	

Project ID: ENSAFE-WESTBURY
Client ID: SVE EFFLUENT

Phoenix I.D.: CA67808

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

Comments:

S - Laboratory solvent, contamination is possible.

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director

June 18, 2018

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

June 18, 2018

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

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	JW	06/07/18	10:50
Location Code:	ENVIROTR	Received by:	SW	06/11/18	15:49
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	809				

Laboratory Data

SDG ID: GCA67808
Phoenix ID: CA67809

Project ID: ENSAFE-WESTBURY
Client ID: SVE INFLUENT

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Volatiles (TO15)								
1,1,1,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	06/13/18	KCA	1	1
1,1,1-Trichloroethane	0.700	*0.183*	3.82	*1.00*	06/13/18	KCA	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	06/13/18	KCA	1	
1,1,2-Trichloroethane	ND	*0.183*	ND	*1.00*	06/13/18	KCA	1	
1,1-Dichloroethane	ND	*0.247*	ND	*1.00*	06/13/18	KCA	1	
1,1-Dichloroethene	0.058	*0.051*	0.23	*0.20*	06/13/18	KCA	1	
1,2,4-Trichlorobenzene	ND	*0.135*	ND	*1.00*	06/13/18	KCA	1	
1,2,4-Trimethylbenzene	ND	*0.204*	ND	*1.00*	06/13/18	KCA	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	ND	*1.00*	06/13/18	KCA	1	
1,2-Dichlorobenzene	ND	*0.166*	ND	*1.00*	06/13/18	KCA	1	
1,2-Dichloroethane	ND	*0.247*	ND	*1.00*	06/13/18	KCA	1	
1,2-dichloropropane	ND	*0.217*	ND	*1.00*	06/13/18	KCA	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	ND	*1.00*	06/13/18	KCA	1	
1,3,5-Trimethylbenzene	ND	*0.204*	ND	*1.00*	06/13/18	KCA	1	
1,3-Butadiene	ND	*0.452*	ND	*1.00*	06/13/18	KCA	1	
1,3-Dichlorobenzene	ND	*0.166*	ND	*1.00*	06/13/18	KCA	1	
1,4-Dichlorobenzene	ND	*0.166*	ND	*1.00*	06/13/18	KCA	1	
1,4-Dioxane	ND	*0.278*	ND	*1.00*	06/13/18	KCA	1	
2-Hexanone(MBK)	ND	*0.244*	ND	*1.00*	06/13/18	KCA	1	1
4-Ethyltoluene	ND	*0.204*	ND	*1.00*	06/13/18	KCA	1	1
4-Isopropyltoluene	ND	*0.182*	ND	*1.00*	06/13/18	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	ND	*1.00*	06/13/18	KCA	1	
Acetone	4.76	*0.421*	11.3	*1.00*	06/13/18	KCA	1	
Acrylonitrile	ND	*0.461*	ND	*1.00*	06/13/18	KCA	1	
Benzene	ND	*0.313*	ND	*1.00*	06/13/18	KCA	1	
Benzyl chloride	ND	*0.193*	ND	*1.00*	06/13/18	KCA	1	

Project ID: ENSAFE-WESTBURY
Client ID: SVE INFLUENT

Phoenix I.D.: CA67809

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	ND	*1.00*	06/13/18	KCA	1	
Bromoform	ND	*0.097*	ND	*1.00*	06/13/18	KCA	1	
Bromomethane	ND	*0.258*	ND	*1.00*	06/13/18	KCA	1	
Carbon Disulfide	ND	*0.321*	ND	*1.00*	06/13/18	KCA	1	
Carbon Tetrachloride	0.085	*0.032*	0.53	*0.20*	06/13/18	KCA	1	
Chlorobenzene	ND	*0.217*	ND	*1.00*	06/13/18	KCA	1	
Chloroethane	ND	*0.379*	ND	*1.00*	06/13/18	KCA	1	
Chloroform	0.231	*0.205*	1.13	*1.00*	06/13/18	KCA	1	
Chloromethane	ND	*0.485*	ND	*1.00*	06/13/18	KCA	1	
Cis-1,2-Dichloroethene	140	*7.57*	555	*30.0*	06/13/18	KCA	150	
cis-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	06/13/18	KCA	1	
Cyclohexane	ND	*0.291*	ND	*1.00*	06/13/18	KCA	1	
Dibromochloromethane	ND	*0.118*	ND	*1.00*	06/13/18	KCA	1	
Dichlorodifluoromethane	0.603	*0.202*	2.98	*1.00*	06/13/18	KCA	1	
Ethanol	1.08	*0.531*	2.03	*1.00*	06/13/18	KCA	1	1
Ethyl acetate	0.892	*0.278*	3.21	*1.00*	06/13/18	KCA	1	1
Ethylbenzene	ND	*0.230*	ND	*1.00*	06/13/18	KCA	1	
Heptane	ND	*0.244*	ND	*1.00*	06/13/18	KCA	1	
Hexachlorobutadiene	ND	*0.094*	ND	*1.00*	06/13/18	KCA	1	
Hexane	ND	*0.284*	ND	*1.00*	06/13/18	KCA	1	
Isopropylalcohol	1.55	*0.407*	3.81	*1.00*	06/13/18	KCA	1	
Isopropylbenzene	ND	*0.204*	ND	*1.00*	06/13/18	KCA	1	
m,p-Xylene	ND	*0.230*	ND	*1.00*	06/13/18	KCA	1	
Methyl Ethyl Ketone	2.80	*0.339*	8.25	*1.00*	06/13/18	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	ND	*1.00*	06/13/18	KCA	1	
Methylene Chloride	ND	*0.864*	ND	*3.00*	06/13/18	KCA	1	
n-Butylbenzene	ND	*0.182*	ND	*1.00*	06/13/18	KCA	1	1
o-Xylene	ND	*0.230*	ND	*1.00*	06/13/18	KCA	1	
Propylene	ND	*0.581*	ND	*1.00*	06/13/18	KCA	1	1
sec-Butylbenzene	ND	*0.182*	ND	*1.00*	06/13/18	KCA	1	1
Styrene	ND	*0.235*	ND	*1.00*	06/13/18	KCA	1	
Tetrachloroethene	3730	*5.53*	25300	*37.5*	06/13/18	KCA	150	
Tetrahydrofuran	6.81	*0.339*	20.1	*1.00*	06/13/18	KCA	1	1
Toluene	ND	*0.266*	ND	*1.00*	06/13/18	KCA	1	
Trans-1,2-Dichloroethene	2.10	*0.252*	8.32	*1.00*	06/13/18	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	06/13/18	KCA	1	
Trichloroethene	209	*5.59*	1120	*30.0*	06/13/18	KCA	150	
Trichlorofluoromethane	0.353	*0.178*	1.98	*1.00*	06/13/18	KCA	1	
Trichlorotrifluoroethane	1.73	*0.131*	13.2	*1.00*	06/13/18	KCA	1	
Vinyl Chloride	ND	*0.078*	ND	*0.20*	06/13/18	KCA	1	
QA/QC Surrogates								
% Bromofluorobenzene	102	*%*	102	*%*	06/13/18	KCA	1	

Project ID: ENSAFE-WESTBURY
Client ID: SVE INFLUENT

Phoenix I.D.: CA67809

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

Comments:

If there are any questions regarding this data, please call Phoenix Client Services.
This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis Shiller, Laboratory Director
June 18, 2018
Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

June 18, 2018

QA/QC Data

SDG I.D.: GCA67808

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 434251 (ppbv), QC Sample No: CA68178 (CA67808, CA67809)												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.150	ND	1.03	105	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.180	ND	0.98	108	29.6	30.4	5.43	5.57	2.5	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.150	ND	1.03	106	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.180	ND	0.98	110	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.250	ND	1.01	108	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.050	ND	0.20	103	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.130	ND	0.96	137	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.200	ND	0.98	109	3.28	3.45	0.668	0.703	NC	70 - 130	25
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	112	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorobenzene	ND	0.170	ND	1.02	112	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.250	ND	1.01	111	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.220	ND	1.02	116	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.140	ND	0.98	107	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.200	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.450	ND	0.99	99	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.170	ND	1.02	105	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.170	ND	1.02	109	2.25	2.31	0.374	0.384	NC	70 - 130	25
1,4-Dioxane	ND	0.280	ND	1.01	94	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.240	ND	0.98	107	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.200	ND	0.98	104	2.01	2.05	0.410	0.417	NC	70 - 130	25
4-Isopropyltoluene	ND	0.180	ND	0.99	108	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.240	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.420	ND	1.00	102	110	113	46.3	47.7	3.0	70 - 130	25
Acrylonitrile	ND	0.460	ND	1.00	118	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.310	ND	0.99	103	8.40	8.33	2.63	2.61	0.8	70 - 130	25
Benzyl chloride	ND	0.190	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.150	ND	1.00	113	ND	ND	ND	ND	NC	70 - 130	25
Bromoform	ND	0.097	ND	1.00	114	ND	ND	ND	ND	NC	70 - 130	25
Bromomethane	ND	0.260	ND	1.01	95	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.320	ND	1.00	121	2.57	2.57	0.825	0.825	NC	70 - 130	25
Carbon Tetrachloride	ND	0.032	ND	0.20	110	0.36	0.48	0.058	0.077	NC	70 - 130	25
Chlorobenzene	ND	0.220	ND	1.01	112	ND	ND	ND	ND	NC	70 - 130	25
Chloroethane	ND	0.380	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.200	ND	0.98	109	ND	ND	ND	ND	NC	70 - 130	25
Chloromethane	ND	0.480	ND	0.99	100	2.31	2.44	1.12	1.18	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.050	ND	0.20	112	ND	ND	ND	ND	NC	70 - 130	25
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	112	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.290	ND	1.00	109	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.120	ND	1.02	112	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.200	ND	0.99	112	77.6	77.6	15.7	15.7	0.0	70 - 130	25
Ethanol	ND	0.530	ND	1.00	141	6.70	7.17	3.56	3.81	6.8	70 - 130	25

QA/QC Data

SDG I.D.: GCA67808

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits	
Ethyl acetate	ND	0.280	ND	1.01	108	ND	ND	ND	ND	NC	70 - 130	25	
Ethylbenzene	ND	0.230	ND	1.00	114	ND	ND	ND	ND	NC	70 - 130	25	
Heptane	ND	0.240	ND	0.98	107	1.58	1.79	0.385	0.437	NC	70 - 130	25	
Hexachlorobutadiene	ND	0.094	ND	1.00	118	ND	ND	ND	ND	NC	70 - 130	25	
Hexane	ND	0.280	ND	0.99	139	6.13 S	6.16 S	1.74 S	1.75 S	0.6	70 - 130	25	I
Isopropylalcohol	ND	0.410	ND	1.01	106	5.13	5.31	2.09	2.16	3.3	70 - 130	25	
Isopropylbenzene	ND	0.200	ND	0.98	117	ND	ND	ND	ND	NC	70 - 130	25	
m,p-Xylene	ND	0.230	ND	1.00	112	2.95	2.96	0.679	0.682	NC	70 - 130	25	
Methyl Ethyl Ketone	ND	0.340	ND	1.00	106	14.4	14.5	4.88	4.92	0.8	70 - 130	25	
Methyl tert-butyl ether(MTBE)	ND	0.280	ND	1.01	108	ND	ND	ND	ND	NC	70 - 130	25	
Methylene Chloride	ND	0.860	ND	2.99	101	ND	ND	ND	ND	NC	70 - 130	25	
n-Butylbenzene	ND	0.180	ND	0.99	112	ND	ND	ND	ND	NC	70 - 130	25	
o-Xylene	ND	0.230	ND	1.00	115	1.04	1.14	0.240	0.262	NC	70 - 130	25	
Propylene	ND	0.580	ND	1.00	108	ND	ND	ND	ND	NC	70 - 130	25	
sec-Butylbenzene	ND	0.180	ND	0.99	106	ND	ND	ND	ND	NC	70 - 130	25	
Styrene	ND	0.230	ND	0.98	111	ND	ND	ND	ND	NC	70 - 130	25	
Tetrachloroethene	ND	0.037	ND	0.25	114	226	239	33.3	35.2	5.5	70 - 130	25	
Tetrahydrofuran	ND	0.340	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25	
Toluene	ND	0.270	ND	1.02	118	4.37	4.56	1.16	1.21	NC	70 - 130	25	
Trans-1,2-Dichloroethene	ND	0.250	ND	0.99	111	ND	ND	ND	ND	NC	70 - 130	25	
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	108	ND	ND	ND	ND	NC	70 - 130	25	
Trichloroethene	ND	0.037	ND	0.20	110	ND	ND	ND	ND	NC	70 - 130	25	
Trichlorofluoromethane	ND	0.180	ND	1.01	102	40.5	41.1	7.21	7.32	1.5	70 - 130	25	
Trichlorotrifluoroethane	ND	0.130	ND	1.00	103	2.96	2.77	0.387	0.362	NC	70 - 130	25	
Vinyl Chloride	ND	0.078	ND	0.20	96	ND	ND	ND	ND	NC	70 - 130	25	
% Bromofluorobenzene	100		100		102	102	101	102	101	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
June 18, 2018

Monday, June 18, 2018

Criteria: None

State: NY

Sample Criteria Exceedances Report

GCA67808 - ENVIROTR

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units

*** No Data to Display ***

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

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Comments

June 18, 2018 SDG I.D.: GCA67808

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

PHOENIX
Environmental Laboratories, Inc.

587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860-645-1102 • Fax: 860-645-0823

CHAIN OF CUSTODY RECORD
AIR ANALYSES

800-827-5426

email: greg@phoenixlabs.com

P.O.#

Data Delivery:
- ☐ Fax #:
- ☐ Email: jamesw@envirotrac.com
- ☐ Phone #:

Report to: Jim Wilkinson

Customer: EnviroTrac Ltd

Address: 5 Old Dock Road
Yaphank, NY 11980

Invoice to: EnviroTrac

Sampled by: Jim Wilkinson

Project Name: ENSAFE - WESTBURY

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

State where samples collected: NY

Phoenix ID #	Client Sample ID	Canister ID #	Canister Size (L)	Outgoing Canister Pressure (" Hg)	Incoming Canister Pressure ("Hg)	Flow Regulator ID #	Flow Controller Setting (mL/min)	Sampling Start Time	Sampling End Time	Sample Start Date	Canister Pressure at Start (" Hg)	Canister Pressure at End ("Hg)	Ambient/Indoor Air	Soil Gas	Grab((G))/Composite(C)	TO-14	TO-15
		THIS SECTION FOR LAB USE ONLY											MATRIX			ANALYSES	
67808	SVE EFFLUENT	754	1.4	-30		NA	NA	10:45	10:46	6/7							4
67809	SVE INFLUENT	809	1.4	-30		NA	NA	10:50	10:51	6/7							4

Relinquished by: [signature] — Date: 6-11-18 — Time: 9:30

Accepted by: [signature] — Date: 6-11-18 — Time: 1549

Data Format:
Excel ☑ Equis ☐ Other ☑ (PDF)

Turnaround Time:
☐ 24 Hour ☐ 48 Hour ☐ 72 Hour ☑ Standard

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

(3)(1.4) GRAB

Requested Criteria

Quote Number:

I attest that all media released by Phoenix Environmental Laboratories, Inc. have been received in good working condition and agree to the terms and conditions as listed on the back of this document:

Signature: Date:

Appendix C

Groundwater Extraction/Hydraulic Containment System Installation

Summary Report

Frost Street Sites
Groundwater Extraction Hydraulic Containment
Summary Report
Friday, June 1 through Saturday, June 30, 2018

Full system startup occurred this month while pump test results and revised flow rates are developed, as described below.

- A variance request was submitted to the Nassau County POTW; the request was to lower the pH low limit from 5.5 to 4.5 which was subsequently denied.

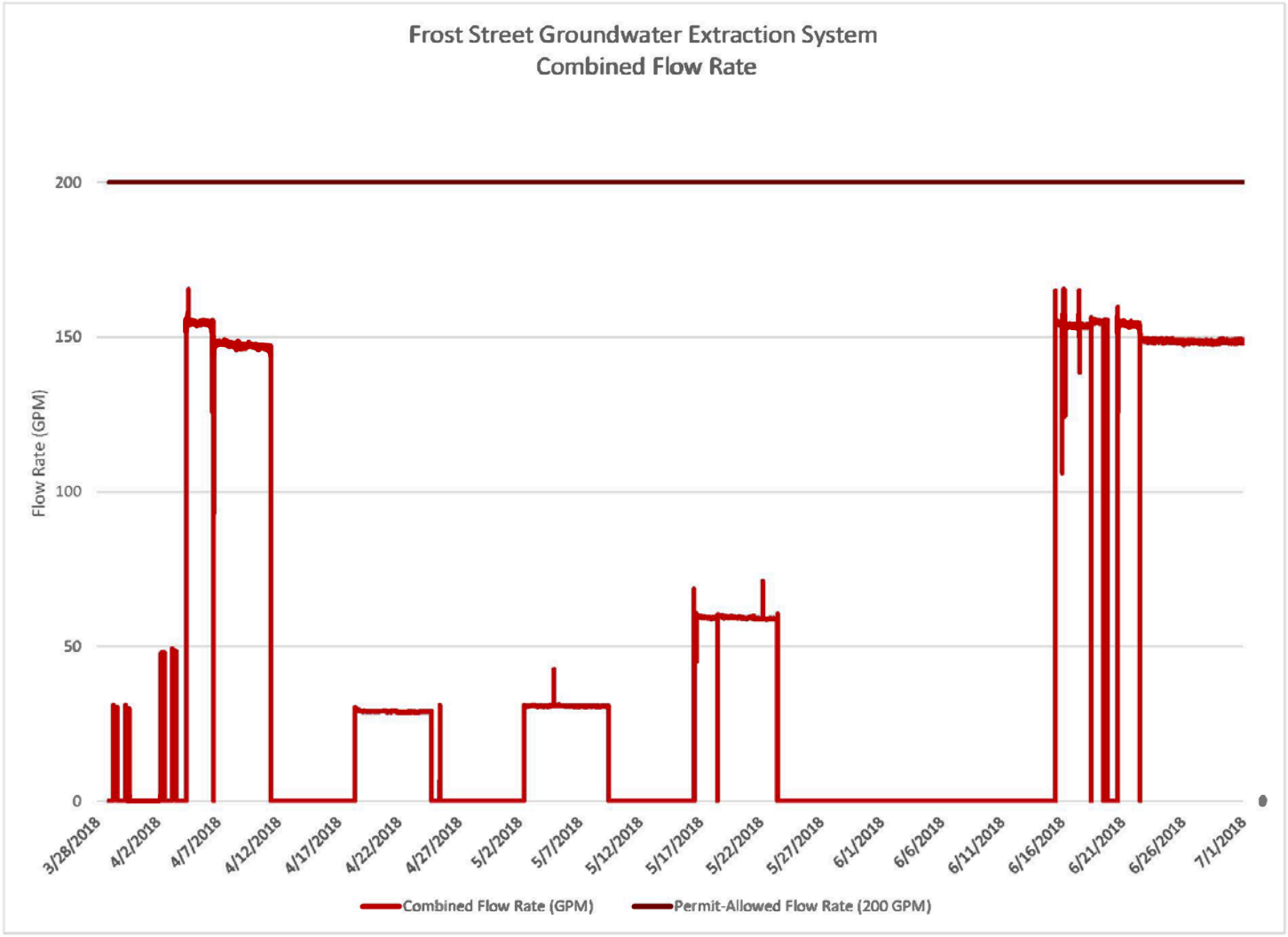
- As such, design and procurement of an in-vault pretreatment was required. The selected pretreatment was an in-vault treatment cell in which approximately 50 gallons of PHIX material would be placed. The extraction well flows would be diverted into and through this cell to raise the pH to the required 5.5.

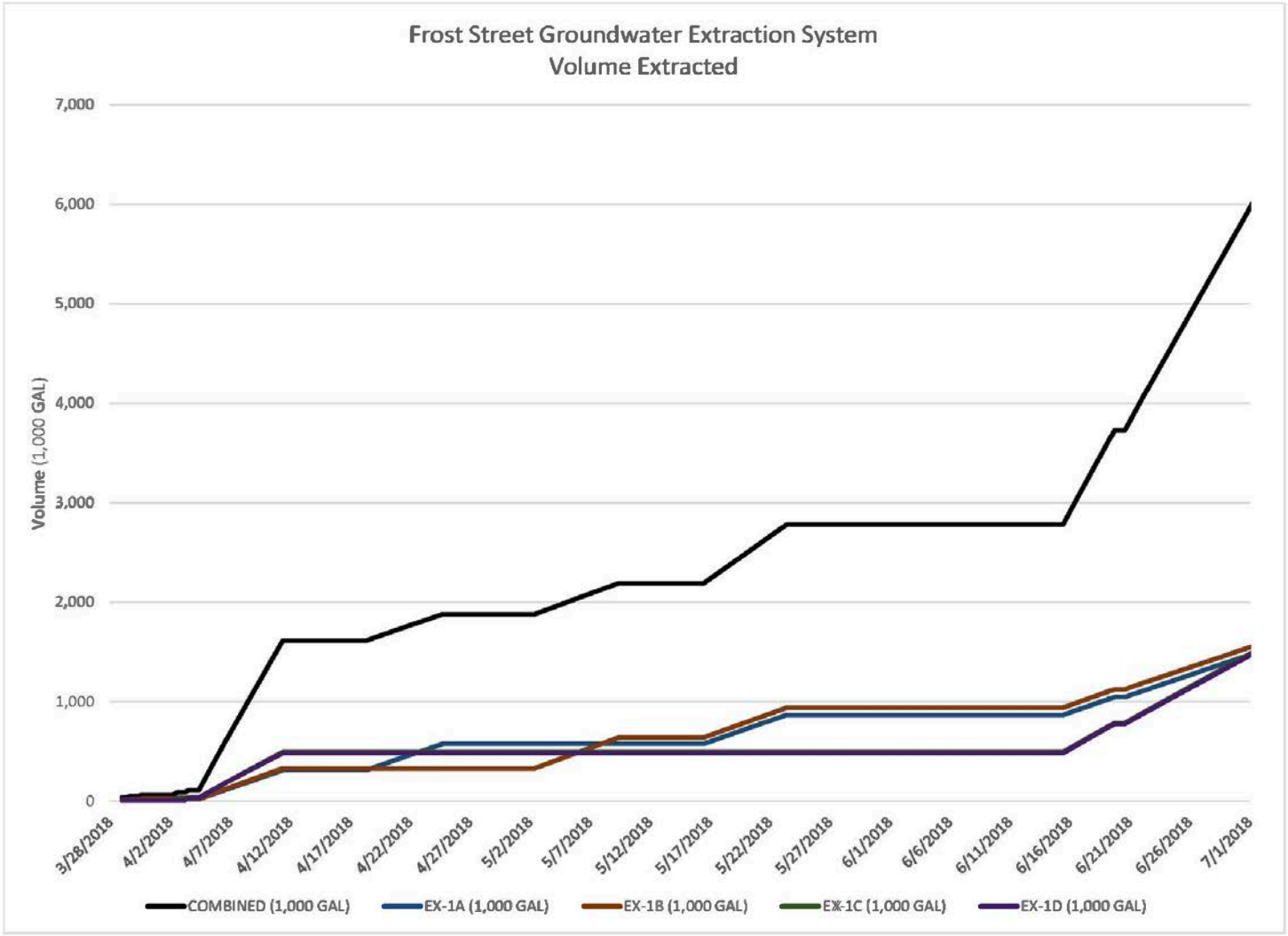
    - The cell was installed on May 31, 2018 and the PHIX was installed on June 15, 2018, as shown below. The wells discharge to the "L" shaped area to create a backwater pool, flow over the walls into the PHIX cell, and then through holes in the outlet wall to the vault discharge pipe (top left corner of the photographs). The system was made operational at design flow rates after the PHIX was installed.

    - Throughout the month, troubleshooting of the pretreatment cell to maximize treatment capacity occurred. This included installing additional holes on the outlet and inlet walls. Additional PHIX material has been ordered to replace some material that compacted and/or washed out during these efforts. This material will be installed once received.

The graphs below present a summary of the system operational data (flow rates and total volume extracted) for the system to date.


Frost Street Groundwater Extraction System
Individual Flow Rates
Flow Rate (GPM)
60
50
40
30
20
10
0
3/28/2018
4/2/2018
4/7/2018
4/12/2018
4/17/2018
4/22/2018
4/27/2018
5/2/2018
5/7/2018
5/12/2018
5/17/2018
5/22/2018
5/27/2018
6/1/2018
6/6/2018
6/11/2018
6/16/2018
6/21/2018
6/26/2018
7/1/2018
EX-1A (GPM)
EX-1B (GPM)
EX-1C (GPM)
EX-1D (GPM)

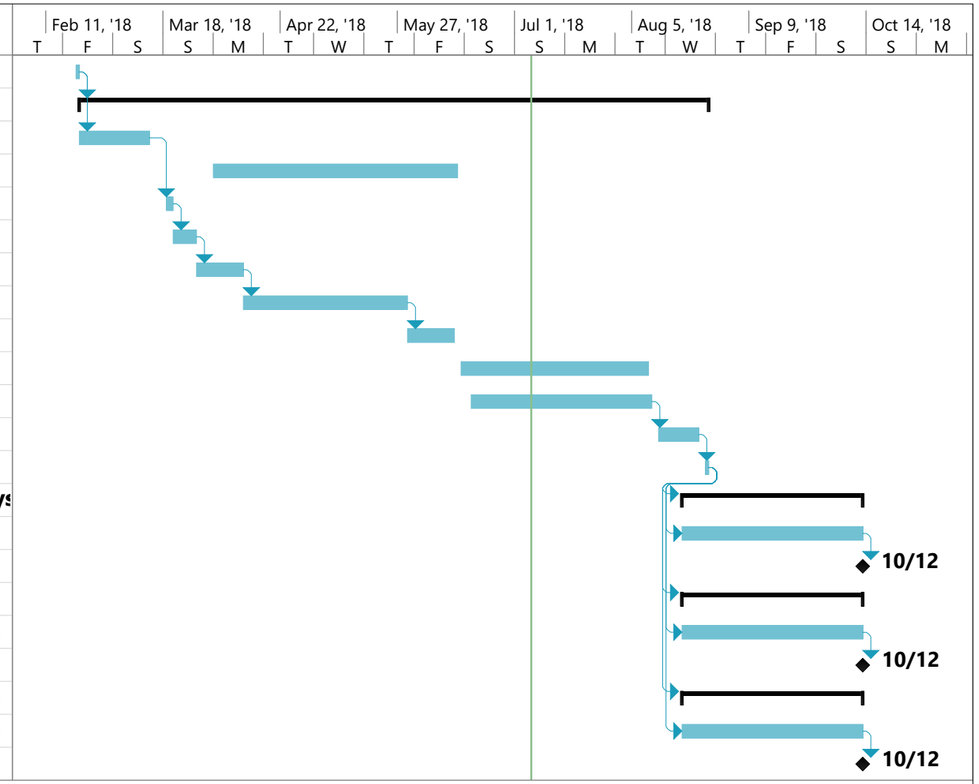

Frost Street Groundwater Extraction System
Combined Flow Rate
200
150
100
50
0
Flow Rate (GPM)
3/28/2018
4/2/2018
4/7/2018
4/12/2018
4/17/2018
4/22/2018
4/27/2018
5/2/2018
5/7/2018
5/12/2018
5/17/2018
5/22/2018
5/27/2018
6/1/2018
6/6/2018
6/11/2018
6/16/2018
6/21/2018
6/26/2018
7/1/2018
Combined Flow Rate (GPM)
Permit-Allowed Flow Rate (200 GPM)


Frost Street Groundwater Extraction System
Volume Extracted
Volume (1,000 GAL)
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
3/28/2018
4/2/2018
4/7/2018
4/12/2018
4/17/2018
4/22/2018
4/27/2018
5/2/2018
5/7/2018
5/12/2018
5/17/2018
5/22/2018
5/27/2018
6/1/2018
6/6/2018
6/11/2018
6/16/2018
6/21/2018
6/26/2018
7/1/2018
COMBINED (1,000 GAL)
EX-1A (1,000 GAL)
EX-1B (1,000 GAL)
EX-1C (1,000 GAL)
EX-1D (1,000 GAL)

Appendix D

Revised Schedule

ID	Task Name	Duration	Start	Finish	Predecessors
1	**1 Resolution of Pumping Test Scope**	1 day	Tue 2/20/18	Tue 2/20/18	
2	**2 Post-Construction Performance Monitoring and Optimization**	**134 days**	**Wed 2/21/18**	**Mon 8/27/18**	**1**
3	2.1 Field Preparation	3 wks	Wed 2/21/18	Tue 3/13/18	1
4	2.2 Site Survey Performance and Receipt of Well Elevations	53 days	Mon 4/2/18	Wed 6/13/18	
5	2.3 Temporary System Startup and Testing	2 days	Mon 3/19/18	Tue 3/20/18	3FS+3 days
6	2.4 Baseline Data Collection	1 wk	Wed 3/21/18	Tue 3/27/18	5
7	2.5 Pumping Test - Phase I	2 wks	Wed 3/28/18	Tue 4/10/18	6
8	2.6 Pumping Test - Phase II	7 wks	Wed 4/11/18	Tue 5/29/18	7
9	2.7 Pumping Test - Phase II - Additional Testing (If Required)	2 wks	Wed 5/30/18	Tue 6/12/18	8
10	2.8 System Set to Run at Design Pumping Rates	8 wks	Fri 6/15/18	Thu 8/9/18	
11	2.9 Develop Model and Submit Letter Report with Recommendations to NYSDEC	8 wks	Mon 6/18/18	Fri 8/10/18	
12	2.10 NYSDEC Review and Approval of Letter Report and Proposed Pumping Rates	2 wks	Mon 8/13/18	Fri 8/24/18	11
13	2.11 System Set to Run at Approved Revised Pumping Rates	1 day	Mon 8/27/18	Mon 8/27/18	12
14	**3 Final Engineering Report**	**40 days**	**Mon 8/20/18**	**Fri 10/12/18**	**13FS-6 days**
15	3.1 Develop FER	8 wks	Mon 8/20/18	Fri 10/12/18	13FS-6 days
16	3.2 Submit FER to NYSDEC	0 days	Fri 10/12/18	Fri 10/12/18	15
17	**4 Site Management Plan**	**40 days**	**Mon 8/20/18**	**Fri 10/12/18**	13FS-6 days
18	4.1 Develop SMP	8 wks	Mon 8/20/18	Fri 10/12/18	13FS-6 days
19	4.2 Submit SMP to NYSDEC	0 days	Fri 10/12/18	Fri 10/12/18	18
20	**5 Environmental Easement**	**40 days**	**Mon 8/20/18**	**Fri 10/12/18**	13FS-6 days
21	5.1 Develop Environmental Easement	8 wks	Mon 8/20/18	Fri 10/12/18	13FS-6 days
22	5.2 Submit Environmental Easement to NYSDEC	0 days	Fri 10/12/18	Fri 10/12/18	21



Frost Street Revised Schedule
July 2018

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone