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

May 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: April 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 April 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 April 13, 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 [33,253 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 ($\mu g/m^3$)	April 2018 Effluent Concentration ($\mu g/m^3$)
Trichloroethene	500	19,000	ND
Tetrachloroethene	1,000	38,000	ND
Vinyl Chloride	100	3,800	ND
Cis-1,2-Dichloroethene	100	3,800	0.64

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)

The pump test continued for the groundwater extraction system, as described below and in the attached summary reports (**Appendix C**).

- Phase I was completed on April 11, 2018, and Phase II began thereafter and is ongoing.
- Extraction wells show appropriate response to pumping and have sustained the design flow rates.

Quarterly/Annual Groundwater Monitoring

- The fourth quarter 2017 groundwater sampling event was submitted on May 9, 2018.
- The first quarter 2018 groundwater sampling event was completed during the weeks of March 12 and 19, 2018. This event is the "annual", fifth quarter event which includes sampling from all active monitoring wells. Results will be submitted in a forthcoming report, when available.

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

Sincerely,

EnSafe, Inc., by

Alexandra Stark, P.E.

Copies:	A. Tamuno, Esq., NYSDEC	*Via email to amtamuno@gw.dec.state.ny.us*
	G. Bobersky, NYSDEC	*Via email to gtbobers@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. 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*
	J. LaPoma, U.S. EPA	*Via email to lapoma.jennifer@epa.gov*
	J. Heaney, Walden Associates	*Via email to jheaney@walden-associates.com*
	P. Coop, EnSafe	*Via email to pcoop@ensafe.com*
	J. Parillo, EnSafe	*Via email to jparillo@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: 6-Apr
Weather / Temp: Rain / 50 DEG
Technician / Operator: JW

Arrival Time: 9:30
Departure Time: 10:00

System Status

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

Soil Vapor Extraction System

Blower Air Velocity/Flow Rate (fpm)/(cfm)	4400	864	Blower 1 Total Runtime (hrs)	49,975.7
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	49,799.4
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0
Moisture Separator Vacuum ("Hg)	4		Blower 2 Air Filter Differential Pressure ("H2O)	0
VGAC-1 Influent Vacuum ("H2O)	70		VGAC-1 Influent PID (ppm)	1.7
VGAC-1 Effluent Vacuum ("H2O)	70		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	70		VGAC-2 Influent PID (ppm)	1.7
VGAC-2 Effluent Vacuum ("H2O)	80		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Pressure ("H2O)	12		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Pressure ("H2O)	2		VGAC-3 Effluent PID (ppm)	0.0
VGAC-2 Influent Temp (DegF)	130		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	15			
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)	50	7500	164		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	44	4000	87	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	52	4500	98		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	44	3000	65	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	44	5000	109		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	43	6500	142	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	43	4200	92		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	45	2900	63	

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)	146
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	25,858
Manifold Regulator Pressure (psi)	70		

AS Manifold Legs - Pressure/Flow Rate

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

Notes, Comments & Observations:

Compressor off upon arrival due to tripped breaker, reset breaker and restarted compressor.

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: 13-Apr
Weather / Temp: Cloudy / 50 DEG
Technician / Operator: JW

Arrival Time: 9:00
Departure Time: 10:30

System Status

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

Soil Vapor Extraction System

Blower Air Velocity/Flow Rate (fpm)/(cfm)	4100	805	Blower 1 Total Runtime (hrs)	50,059.6
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	49,882.7
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)	66		VGAC-1 Influent PID (ppm)	6.2
VGAC-1 Effluent Vacuum ("H2O)	72		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	60		VGAC-2 Influent PID (ppm)	6.2
VGAC-2 Effluent Vacuum ("H2O)	78		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Pressure ("H2O)	12		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Pressure ("H2O)	2		VGAC-3 Effluent PID (ppm)	0.0
VGAC-2 Influent Temp (DegF)	138		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	20			
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)	48	7250	158	12.8	SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	40	3800	83	0.0
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	50	4500	98	5.1	SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	41	2800	61	0.0
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	42	4700	103	3.3	SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	40	6250	136	21.0
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	40	4000	87	0.0	SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	42	2800	61	1.9

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)	186
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	26,025
Manifold Regulator Pressure (psi)	70		

AS Manifold Legs - Pressure/Flow Rate

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

Notes, Comments & Observations:

Collected monthly air 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: 19-Apr
Weather / Temp: Rain / 50 DEG
Technician / Operator: JW

Arrival Time: 9:00
Departure Time: 10:00

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)	4200	825	Blower 1 Total Runtime (hrs)	50,131.6
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	49,954.9
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)	66		VGAC-1 Influent PID (ppm)	4.5
VGAC-1 Effluent Vacuum ("H2O)	70		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	60		VGAC-2 Influent PID (ppm)	4.5
VGAC-2 Effluent Vacuum ("H2O)	78		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Pressure ("H2O)	12		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Pressure ("H2O)	2		VGAC-3 Effluent PID (ppm)	0.0
VGAC-2 Influent Temp (DegF)	122		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	20			
Transfer Pump Total Runtime (hrs)	25,033.0		Condensate Storage Tank Level (gal)	225

SVE Manifold Legs - Vacuum/Flow Rate/PID									
	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	50	7500	164		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	44	4000	87	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	53	4500	98		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	44	3000	65	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	44	5000	109		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	44	6500	142	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	44	4300	94		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	45	3100	68	

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)	162
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	26,169
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)	14	7	AS-12B (psi)/(cfm)	14	10
AS-3 (psi)/(cfm)	14	6	AS-13B (psi)/(cfm)	13	10
AS-4 (psi)/(cfm)	13	9	AS-14 (psi)/(cfm)	13	10
AS-5 (psi)/(cfm)	15	7	AS-15 (psi)/(cfm)	13	12
AS-6 (psi)/(cfm)	15	9	AS-16B (psi)/(cfm)	14	10
AS-7 (psi)/(cfm)	14	4	AS-17 (psi)/(cfm)	13	5
AS-8 (psi)/(cfm)	15	10	AS-18 (psi)/(cfm)	12	6
AS-9 (psi)/(cfm)	15	6	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: 27-Apr
Weather / Temp: Clear / 55 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	Sensaphone (ON/OFF)	ON	ON
SVE Blower 2 (ON/OFF)	OFF	OFF	Surge Protection (ON/OFF)	ON	ON
AS Compressor 1 (ON/OFF)	OFF	OFF	Lightning Protection (White/Black)	White	White
AS Compressor 2 (ON/OFF)	ON	ON			

Soil Vapor Extraction System

Blower Air Velocity/Flow Rate (fpm)/(cfm)	4500	884	Blower 1 Total Runtime (hrs)	50,232.3
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	50,047.9
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0
Moisture Separator Vacuum ("Hg)	4		Blower 2 Air Filter Differential Pressure ("H2O)	0
VGAC-1 Influent Vacuum ("H2O)	65		VGAC-1 Influent PID (ppm)	3.9
VGAC-1 Effluent Vacuum ("H2O)	70		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	60		VGAC-2 Influent PID (ppm)	3.9
VGAC-2 Effluent Vacuum ("H2O)	77		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Pressure ("H2O)	14		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Pressure ("H2O)	2		VGAC-3 Effluent PID (ppm)	0.0
VGAC-2 Influent Temp (DegF)	124		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	20			
Transfer Pump Total Runtime (hrs)	25,033.0		Condensate Storage Tank Level (gal)	260

SVE Manifold Legs - Vacuum/Flow Rate/PID

	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	52	7750	169		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	44	4500	98	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	54	5000	109		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	44	3400	74	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	44	5200	113		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	44	7000	153	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	44	4400	96		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	45	3500	76	

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)	169
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	26,363
Manifold Regulator Pressure (psi)	70		

AS Manifold Legs - Pressure/Flow Rate

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

Notes, Comments & Observations:

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

Alarm Date	Site Visit Date	Personnel	ALARM DESCRIPTION	Corrective Action	SVE Status Upon Departure	AS Status Upon Departure
None	4/6/2018	JW	AS Fault - compressor off due to tripped breaker	Reset breaker, restarted.	ON	ON

Appendix B

SVE System Influent/Effluent Sampling (TO-15)

Laboratory Analytical Results

PHOENIX
Environmental Laboratories, Inc.

Friday, April 20, 2018

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

Project ID: ENSAFE-WESTBURY
Sample ID#s: CA20641 - CA20642

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

April 20, 2018

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

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	JW	04/13/18	9:51
Location Code:	ENVIROTR	Received by:	SW	04/16/18	17:18
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	816				

Laboratory Data

SDG ID: GCA20641
Phoenix ID: CA20641

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*	04/17/18	DD	1	1
1,1,1-Trichloroethane	0.695	*0.183*	3.79	*1.00*	04/17/18	DD	1	
1,1,2,2-Tetrachloroethane	ND	*0.146*	ND	*1.00*	04/17/18	DD	1	
1,1,2-Trichloroethane	ND	*0.183*	ND	*1.00*	04/17/18	DD	1	
1,1-Dichloroethane	ND	*0.247*	ND	*1.00*	04/17/18	DD	1	
1,1-Dichloroethene	0.070	*0.051*	0.28	*0.20*	04/17/18	DD	1	
1,2,4-Trichlorobenzene	ND	*0.135*	ND	*1.00*	04/17/18	DD	1	
1,2,4-Trimethylbenzene	ND	*0.204*	ND	*1.00*	04/17/18	DD	1	
1,2-Dibromoethane(EDB)	ND	*0.130*	ND	*1.00*	04/17/18	DD	1	
1,2-Dichlorobenzene	ND	*0.166*	ND	*1.00*	04/17/18	DD	1	
1,2-Dichloroethane	ND	*0.247*	ND	*1.00*	04/17/18	DD	1	
1,2-dichloropropane	ND	*0.217*	ND	*1.00*	04/17/18	DD	1	
1,2-Dichlorotetrafluoroethane	ND	*0.143*	ND	*1.00*	04/17/18	DD	1	
1,3,5-Trimethylbenzene	ND	*0.204*	ND	*1.00*	04/17/18	DD	1	
1,3-Butadiene	ND	*0.452*	ND	*1.00*	04/17/18	DD	1	
1,3-Dichlorobenzene	ND	*0.166*	ND	*1.00*	04/17/18	DD	1	
1,4-Dichlorobenzene	ND	*0.166*	ND	*1.00*	04/17/18	DD	1	
1,4-Dioxane	ND	*0.278*	ND	*1.00*	04/17/18	DD	1	
2-Hexanone(MBK)	ND	*0.244*	ND	*1.00*	04/17/18	DD	1	1
4-Ethyltoluene	ND	*0.204*	ND	*1.00*	04/17/18	DD	1	1
4-Isopropyltoluene	ND	*0.182*	ND	*1.00*	04/17/18	DD	1	1
4-Methyl-2-pentanone(MIBK)	ND	*0.244*	ND	*1.00*	04/17/18	DD	1	
Acetone	16.3	*0.421*	38.7	*1.00*	04/17/18	DD	1	
Acrylonitrile	ND	*0.461*	ND	*1.00*	04/17/18	DD	1	
Benzene	ND	*0.313*	ND	*1.00*	04/17/18	DD	1	
Benzyl chloride	ND	*0.193*	ND	*1.00*	04/17/18	DD	1	

Project ID: ENSAFE-WESTBURY
Client ID: SVE INFLUENT

Phoenix I.D.: CA20641

Parameter	ppbv Result	ppbv RL		ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	2.16	*0.149*		14.5	*1.00*	04/17/18	DD	1	
Bromoform	ND	*0.097*		ND	*1.00*	04/17/18	DD	1	
Bromomethane	ND	*0.258*		ND	*1.00*	04/17/18	DD	1	
Carbon Disulfide	ND	*0.321*		ND	*1.00*	04/17/18	DD	1	
Carbon Tetrachloride	0.091	*0.032*		0.57	*0.20*	04/17/18	DD	1	
Chlorobenzene	0.459	*0.217*		2.11	*1.00*	04/17/18	DD	1	
Chloroethane	ND	*0.379*		ND	*1.00*	04/17/18	DD	1	
Chloroform	ND	*0.205*		ND	*1.00*	04/17/18	DD	1	
Chloromethane	ND	*0.485*		ND	*1.00*	04/17/18	DD	1	
Cis-1,2-Dichloroethene	243	*1.51*		963	*5.98*	04/18/18	DD	30	
cis-1,3-Dichloropropene	ND	*0.221*		ND	*1.00*	04/17/18	DD	1	
Cyclohexane	ND	*0.291*		ND	*1.00*	04/17/18	DD	1	
Dibromochloromethane	ND	*0.118*		ND	*1.00*	04/17/18	DD	1	
Dichlorodifluoromethane	0.596	*0.202*		2.95	*1.00*	04/17/18	DD	1	
Ethanol	2.79	*0.531*		5.25	*1.00*	04/17/18	DD	1	1
Ethyl acetate	ND	*0.278*		ND	*1.00*	04/17/18	DD	1	1
Ethylbenzene	ND	*0.230*		ND	*1.00*	04/17/18	DD	1	
Heptane	ND	*0.244*		ND	*1.00*	04/17/18	DD	1	
Hexachlorobutadiene	ND	*0.094*		ND	*1.00*	04/17/18	DD	1	
Hexane	ND	*0.284*		ND	*1.00*	04/17/18	DD	1	
Isopropylalcohol	1.56	*0.407*		3.83	*1.00*	04/17/18	DD	1	
Isopropylbenzene	ND	*0.204*		ND	*1.00*	04/17/18	DD	1	
m,p-Xylene	ND	*0.230*		ND	*1.00*	04/17/18	DD	1	
Methyl Ethyl Ketone	82.9	*10.2*		244	*30.1*	04/18/18	DD	30	
Methyl tert-butyl ether(MTBE)	ND	*0.278*		ND	*1.00*	04/17/18	DD	1	
Methylene Chloride	3.32	S	*0.864*	11.5	*3.00*	04/17/18	DD	1	
n-Butylbenzene	ND	*0.182*		ND	*1.00*	04/17/18	DD	1	1
o-Xylene	ND	*0.230*		ND	*1.00*	04/17/18	DD	1	
Propylene	ND	*0.581*		ND	*1.00*	04/17/18	DD	1	1,B
sec-Butylbenzene	ND	*0.182*		ND	*1.00*	04/17/18	DD	1	1
Styrene	ND	*0.235*		ND	*1.00*	04/17/18	DD	1	
Tetrachloroethene	4470	*5.53*		30300	*37.5*	04/18/18	DD	150	
Tetrahydrofuran	28.0	*0.339*		82.5	*1.00*	04/17/18	DD	1	1
Toluene	ND	*0.266*		ND	*1.00*	04/17/18	DD	1	
Trans-1,2-Dichloroethene	3.71	*0.252*		14.7	*1.00*	04/17/18	DD	1	
trans-1,3-Dichloropropene	ND	*0.221*		ND	*1.00*	04/17/18	DD	1	
Trichloroethene	370	*1.12*		1990	*6.01*	04/18/18	DD	30	
Trichlorofluoromethane	0.357	*0.178*		2.00	*1.00*	04/17/18	DD	1	
Trichlorotrifluoroethane	0.370	*0.131*		2.83	*1.00*	04/17/18	DD	1	
Vinyl Chloride	ND	*0.078*		ND	*0.20*	04/17/18	DD	1	
QA/QC Surrogates									
% Bromofluorobenzene	111	*%*		111	*%*	04/17/18	DD	1	

Ver 1

Project ID: ENSAFE-WESTBURY
Client ID: SVE INFLUENT

Phoenix I.D.: CA20641

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.
B = Present in blank, no bias suspected.

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.
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Phyllis Shiller, Laboratory Director

April 20, 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

April 20, 2018

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

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	JW	04/13/18	9:45
Location Code:	ENVIROTR	Received by:	SW	04/16/18	17:18
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	838				

Laboratory Data

SDG ID: GCA20641
Phoenix ID: CA20642

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*	04/17/18	DD	1	1
1,1,1-Trichloroethane	ND		*0.183*	ND	*1.00*	04/17/18	DD	1	
1,1,2,2-Tetrachloroethane	ND		*0.146*	ND	*1.00*	04/17/18	DD	1	
1,1,2-Trichloroethane	ND		*0.183*	ND	*1.00*	04/17/18	DD	1	
1,1-Dichloroethane	ND		*0.247*	ND	*1.00*	04/17/18	DD	1	
1,1-Dichloroethene	ND		*0.051*	ND	*0.20*	04/17/18	DD	1	
1,2,4-Trichlorobenzene	ND		*0.135*	ND	*1.00*	04/17/18	DD	1	
1,2,4-Trimethylbenzene	ND		*0.204*	ND	*1.00*	04/17/18	DD	1	
1,2-Dibromoethane(EDB)	ND		*0.130*	ND	*1.00*	04/17/18	DD	1	
1,2-Dichlorobenzene	ND		*0.166*	ND	*1.00*	04/17/18	DD	1	
1,2-Dichloroethane	ND		*0.247*	ND	*1.00*	04/17/18	DD	1	
1,2-dichloropropane	ND		*0.217*	ND	*1.00*	04/17/18	DD	1	
1,2-Dichlorotetrafluoroethane	ND		*0.143*	ND	*1.00*	04/17/18	DD	1	
1,3,5-Trimethylbenzene	ND		*0.204*	ND	*1.00*	04/17/18	DD	1	
1,3-Butadiene	ND		*0.452*	ND	*1.00*	04/17/18	DD	1	
1,3-Dichlorobenzene	ND		*0.166*	ND	*1.00*	04/17/18	DD	1	
1,4-Dichlorobenzene	ND		*0.166*	ND	*1.00*	04/17/18	DD	1	
1,4-Dioxane	ND		*0.278*	ND	*1.00*	04/17/18	DD	1	
2-Hexanone(MBK)	ND		*0.244*	ND	*1.00*	04/17/18	DD	1	1
4-Ethyltoluene	ND		*0.204*	ND	*1.00*	04/17/18	DD	1	1
4-Isopropyltoluene	ND		*0.182*	ND	*1.00*	04/17/18	DD	1	1
4-Methyl-2-pentanone(MIBK)	ND		*0.244*	ND	*1.00*	04/17/18	DD	1	
Acetone	3.88	S	*0.421*	9.21	*1.00*	04/17/18	DD	1	
Acrylonitrile	ND		*0.461*	ND	*1.00*	04/17/18	DD	1	
Benzene	ND		*0.313*	ND	*1.00*	04/17/18	DD	1	
Benzyl chloride	ND		*0.193*	ND	*1.00*	04/17/18	DD	1	

Project ID: ENSAFE-WESTBURY
Client ID: SVE EFFLUENT

Phoenix I.D.: CA20642

Parameter	ppbv Result		ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND		*0.149*	ND	*1.00*	04/17/18	DD	1	
Bromoform	ND		*0.097*	ND	*1.00*	04/17/18	DD	1	
Bromomethane	ND		*0.258*	ND	*1.00*	04/17/18	DD	1	
Carbon Disulfide	ND		*0.321*	ND	*1.00*	04/17/18	DD	1	
Carbon Tetrachloride	ND		*0.032*	ND	*0.20*	04/17/18	DD	1	
Chlorobenzene	ND		*0.217*	ND	*1.00*	04/17/18	DD	1	
Chloroethane	ND		*0.379*	ND	*1.00*	04/17/18	DD	1	
Chloroform	ND		*0.205*	ND	*1.00*	04/17/18	DD	1	
Chloromethane	ND		*0.485*	ND	*1.00*	04/17/18	DD	1	
Cis-1,2-Dichloroethene	0.162		*0.051*	0.64	*0.20*	04/17/18	DD	1	
cis-1,3-Dichloropropene	ND		*0.221*	ND	*1.00*	04/17/18	DD	1	
Cyclohexane	ND		*0.291*	ND	*1.00*	04/17/18	DD	1	
Dibromochloromethane	ND		*0.118*	ND	*1.00*	04/17/18	DD	1	
Dichlorodifluoromethane	0.695		*0.202*	3.43	*1.00*	04/17/18	DD	1	
Ethanol	2.01		*0.531*	3.78	*1.00*	04/17/18	DD	1	1
Ethyl acetate	ND		*0.278*	ND	*1.00*	04/17/18	DD	1	1
Ethylbenzene	ND		*0.230*	ND	*1.00*	04/17/18	DD	1	
Heptane	ND		*0.244*	ND	*1.00*	04/17/18	DD	1	
Hexachlorobutadiene	ND		*0.094*	ND	*1.00*	04/17/18	DD	1	
Hexane	ND		*0.284*	ND	*1.00*	04/17/18	DD	1	
Isopropylalcohol	1.24		*0.407*	3.05	*1.00*	04/17/18	DD	1	
Isopropylbenzene	ND		*0.204*	ND	*1.00*	04/17/18	DD	1	
m,p-Xylene	ND		*0.230*	ND	*1.00*	04/17/18	DD	1	
Methyl Ethyl Ketone	ND		*0.339*	ND	*1.00*	04/17/18	DD	1	
Methyl tert-butyl ether(MTBE)	ND		*0.278*	ND	*1.00*	04/17/18	DD	1	
Methylene Chloride	1.98	S	*0.864*	6.87	*3.00*	04/17/18	DD	1	
n-Butylbenzene	ND		*0.182*	ND	*1.00*	04/17/18	DD	1	1
o-Xylene	ND		*0.230*	ND	*1.00*	04/17/18	DD	1	
Propylene	ND		*0.581*	ND	*1.00*	04/17/18	DD	1	1,B
sec-Butylbenzene	ND		*0.182*	ND	*1.00*	04/17/18	DD	1	1
Styrene	ND		*0.235*	ND	*1.00*	04/17/18	DD	1	
Tetrachloroethene	ND		*0.037*	ND	*0.25*	04/17/18	DD	1	
Tetrahydrofuran	ND		*0.339*	ND	*1.00*	04/17/18	DD	1	1
Toluene	ND		*0.266*	ND	*1.00*	04/17/18	DD	1	
Trans-1,2-Dichloroethene	ND		*0.252*	ND	*1.00*	04/17/18	DD	1	
trans-1,3-Dichloropropene	ND		*0.221*	ND	*1.00*	04/17/18	DD	1	
Trichloroethene	ND		*0.037*	ND	*0.20*	04/17/18	DD	1	
Trichlorofluoromethane	0.321		*0.178*	1.80	*1.00*	04/17/18	DD	1	
Trichlorotrifluoroethane	ND		*0.131*	ND	*1.00*	04/17/18	DD	1	
Vinyl Chloride	ND		*0.078*	ND	*0.20*	04/17/18	DD	1	
QA/QC Surrogates									
% Bromofluorobenzene	103		*%*	103	*%*	04/17/18	DD	1	

Ver 1

Project ID: ENSAFE-WESTBURY
Client ID: SVE EFFLUENT

Phoenix I.D.: CA20642

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.
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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.
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Phyllis Shiller, Laboratory Director

April 20, 2018

Reviewed and Released by: Greg Lawrence, Assistant Lab Director

PHOENIX

Environmental Laboratories, Inc.
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Tel. (860) 645-1102 Fax (860) 645-0823

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

QA/QC Report

April 20, 2018

QA/QC Data

SDG I.D.: GCA20641

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 426923 (ppbv), QC Sample No: CA20130 (CA20641, CA20642)													
Volatiles													
1,1,1,2-Tetrachloroethane	ND	0.150	ND	1.03	104	ND	ND	ND	ND	NC	70 - 130	25	
1,1,1-Trichloroethane	ND	0.180	ND	0.98	105	ND	ND	ND	ND	NC	70 - 130	25	
1,1,2,2-Tetrachloroethane	ND	0.150	ND	1.03	104	ND	ND	ND	ND	NC	70 - 130	25	
1,1,2-Trichloroethane	ND	0.180	ND	0.98	104	ND	ND	ND	ND	NC	70 - 130	25	
1,1-Dichloroethane	ND	0.250	ND	1.01	96	ND	ND	ND	ND	NC	70 - 130	25	
1,1-Dichloroethene	ND	0.050	ND	0.20	93	ND	ND	ND	ND	NC	70 - 130	25	
1,2,4-Trichlorobenzene	ND	0.130	ND	0.96	141	22.3	22.8	3.01	3.08	2.3	70 - 130	25	I
1,2,4-Trimethylbenzene	ND	0.200	ND	0.98	115	5.26	4.76	1.07	0.969	NC	70 - 130	25	
1,2-Dibromoethane(EDB)	ND	0.130	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25	
1,2-Dichlorobenzene	ND	0.170	ND	1.02	106	ND	ND	ND	ND	NC	70 - 130	25	
1,2-Dichloroethane	ND	0.250	ND	1.01	103	ND	ND	ND	ND	NC	70 - 130	25	
1,2-dichloropropane	ND	0.220	ND	1.02	106	ND	ND	ND	ND	NC	70 - 130	25	
1,2-Dichlorotetrafluoroethane	ND	0.140	ND	0.98	106	ND	ND	ND	ND	NC	70 - 130	25	
1,3,5-Trimethylbenzene	ND	0.200	ND	0.98	111	ND	1.19	ND	0.242	NC	70 - 130	25	
1,3-Butadiene	ND	0.450	ND	0.99	105	ND	ND	ND	ND	NC	70 - 130	25	
1,3-Dichlorobenzene	ND	0.170	ND	1.02	108	216	203	35.9	33.8	6.0	70 - 130	25	
1,4-Dichlorobenzene	ND	0.170	ND	1.02	108	ND	ND	ND	ND	NC	70 - 130	25	
1,4-Dioxane	ND	0.280	ND	1.01	105	ND	ND	ND	ND	NC	70 - 130	25	
2-Hexanone(MBK)	ND	0.240	ND	0.98	121	7.45	5.81	1.82	1.42	24.7	70 - 130	25	
4-Ethyltoluene	ND	0.200	ND	0.98	113	ND	1.64	ND	0.333	NC	70 - 130	25	
4-Isopropyltoluene	ND	0.180	ND	0.99	111	ND	ND	ND	ND	NC	70 - 130	25	
4-Methyl-2-pentanone(MIBK)	ND	0.240	ND	0.98	116	3.14	2.55	0.768	0.622	NC	70 - 130	25	
Acetone	ND	0.420	ND	1.00	99	802	575	338	242	33.1	70 - 130	25	r
Acrylonitrile	ND	0.460	ND	1.00	128	20.1	17.1	9.28	7.87	16.4	70 - 130	25	
Benzene	ND	0.310	ND	0.99	105	14.5	13.2	4.54	4.12	9.7	70 - 130	25	
Benzyl chloride	ND	0.190	ND	0.98	124	ND	ND	ND	ND	NC	70 - 130	25	
Bromodichloromethane	ND	0.150	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25	
Bromoform	ND	0.097	ND	1.00	108	ND	ND	ND	ND	NC	70 - 130	25	
Bromomethane	ND	0.260	ND	1.01	101	ND	ND	ND	ND	NC	70 - 130	25	
Carbon Disulfide	ND	0.320	ND	1.00	93	19.9	22.7	6.41	7.30	13.0	70 - 130	25	
Carbon Tetrachloride	ND	0.032	ND	0.20	103	0.43	0.40	0.068	0.064	NC	70 - 130	25	
Chlorobenzene	ND	0.220	ND	1.01	100	ND	ND	ND	ND	NC	70 - 130	25	
Chloroethane	ND	0.380	ND	1.00	105	ND	ND	ND	ND	NC	70 - 130	25	
Chloroform	ND	0.200	ND	0.98	100	2.28	2.38	0.467	0.487	NC	70 - 130	25	
Chloromethane	ND	0.480	ND	0.99	108	1.91	1.62	0.927	0.786	NC	70 - 130	25	
Cis-1,2-Dichloroethene	ND	0.050	ND	0.20	84	ND	ND	ND	ND	NC	70 - 130	25	
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25	
Cyclohexane	ND	0.290	ND	1.00	113	ND	ND	ND	ND	NC	70 - 130	25	
Dibromochloromethane	ND	0.120	ND	1.02	108	ND	ND	ND	ND	NC	70 - 130	25	
Dichlorodifluoromethane	ND	0.200	ND	0.99	102	2.37	2.99	0.480	0.606	NC	70 - 130	25	
Ethanol	ND	0.530	ND	1.00	127	45.0	38.6	23.9	20.5	15.3	70 - 130	25	

QA/QC Data

SDG I.D.: GCA20641

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	102	55.5	50.1	15.4	13.9	10.2	70 - 130	25	
Ethylbenzene	ND	0.230	ND	1.00	109	5.99	5.68	1.38	1.31	5.2	70 - 130	25	
Heptane	ND	0.240	ND	0.98	108	24.1	22.1	5.88	5.40	8.5	70 - 130	25	
Hexachlorobutadiene	ND	0.094	ND	1.00	114	ND	ND	ND	ND	NC	70 - 130	25	
Hexane	ND	0.280	ND	0.99	107	ND	ND	ND	ND	NC	70 - 130	25	
Isopropylalcohol	ND	0.410	ND	1.01	98	ND	ND	ND	ND	NC	70 - 130	25	
Isopropylbenzene	ND	0.200	ND	0.98	107	ND	ND	ND	ND	NC	70 - 130	25	
m,p-Xylene	ND	0.230	ND	1.00	110	13.2	12.4	3.05	2.86	6.4	70 - 130	25	
Methyl Ethyl Ketone	ND	0.340	ND	1.00	102	70.1	67.8	23.8	23.0	3.4	70 - 130	25	
Methyl tert-butyl ether(MTBE)	ND	0.280	ND	1.01	97	ND	ND	ND	ND	NC	70 - 130	25	
Methylene Chloride	ND	0.860	ND	2.99	95	3.89 S	4.89 S	1.12 S	1.41 S	NC	70 - 130	25	
n-Butylbenzene	ND	0.180	ND	0.99	119	ND	1.25	ND	0.228	NC	70 - 130	25	
o-Xylene	ND	0.230	ND	1.00	107	5.99	5.51	1.38	1.27	8.3	70 - 130	25	
Propylene	0.594	0.580	1.02	1.00	59	ND	ND	ND	ND	NC	70 - 130	25	l
sec-Butylbenzene	ND	0.180	ND	0.99	107	ND	ND	ND	ND	NC	70 - 130	25	
Styrene	ND	0.230	ND	0.98	109	1.50	1.48	0.353	0.347	NC	70 - 130	25	
Tetrachloroethene	ND	0.037	ND	0.25	100	3.67	4.03	0.542	0.594	9.2	70 - 130	25	
Tetrahydrofuran	ND	0.340	ND	1.00	112	ND	ND	ND	ND	NC	70 - 130	25	
Toluene	ND	0.270	ND	1.02	107	26.7	26.3	7.10	6.99	1.6	70 - 130	25	
Trans-1,2-Dichloroethene	ND	0.250	ND	0.99	108	ND	ND	ND	ND	NC	70 - 130	25	
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	112	ND	ND	ND	ND	NC	70 - 130	25	
Trichloroethene	ND	0.037	ND	0.20	102	0.93	0.88	0.174	0.163	NC	70 - 130	25	
Trichlorofluoromethane	ND	0.180	ND	1.01	105	1.54	1.60	0.275	0.285	NC	70 - 130	25	
Trichlorotrifluoroethane	ND	0.130	ND	1.00	92	ND	ND	ND	ND	NC	70 - 130	25	
Vinyl Chloride	ND	0.078	ND	0.20	106	0.38	0.37	0.148	0.145	NC	70 - 130	25	
% Bromofluorobenzene	103		103		103	99	86	99	86	NC	70 - 130	25	

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.
r = This parameter is outside laboratory RPD 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
April 20, 2018

Friday, April 20, 2018

Criteria: None

State: NY

Sample Criteria Exceedances Report

GCA20641 - 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 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

April 20, 2018 SDG I.D.: GCA20641

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

AIRSIM

CHEM20 04/16/18-1: CA20641, CA20642

The following Initial Calibration compounds did not meet RSD% criteria: Propylene 60% (30%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: Propylene 60% (30%)

The following Continuing Calibration compounds did not meet % deviation criteria: Dichlorodifluoromethane(sim) 34%H (30%)
The following Continuing Calibration compounds did not meet Maximum % deviation criteria: Dichlorodifluoromethane(sim) 34%H (30%)

CHAIN OF CUSTODY RECORD
AIR ANALYSES

PHOENIX Environmental Laboratories, Inc.

567 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040
Telephone: 860.645.1102 • Fax: 860.645.0823
800-827-5426
email: greg@phoenixlabs.com

P.O. # Page 1 of 1

Data Delivery:
☐ Fax #:
☑ Email: jam-sw@envirotrac.com
☐ Phone #:

Report to:
Customer: EnviroTrac
Address: 5 Old Dock Road
Yaphank, NY 11980

Invoice to: EnviroTrac

Sampled by: Jim Wilkinson

Project Name: ENSAFE - WESTBURY

Requested Deliverable:
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)	MATRIX: Ambient/Indoor Air	MATRIX: Soil Gas	MATRIX: Grab (G) Composite (C)	ANALYSES: TO-14	ANALYSES: TO-15
	THIS SECTION FOR LAB USE ONLY																
20644	SVE INFLUENT	816	1.4	-30		NA	NA	9:50	9:51	4/13					G		✓
20645	SVE EFFLUENT	838	1.4	-30		NA	NA	9:45	9:46	4/13					G		✓

Relinquished by:	Accepted by:	Date:	Time:
		4-16-18	13:30
		4-16-18	17:18

Data Format:
Excel ☑ Equis ☐ GISKey ☐
PDF ☑ Other: ☐

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION: (2) (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 Reports

Frost Street Sites
Groundwater Extraction Hydraulic Containment
Summary Report
Monday, April 2 through Friday, April 13, 2018

Phase I of the pump test continued.

Monday, April 2, 2018

- Test EX-1C at 48 gpm for 8 hours – well sustained flow rate for duration of test
- System off for 16 hours

Tuesday, April 3, 2018

- Test EX-1D at 48 gpm for 8 hours – well sustained flow rate for duration of test
- System off for 16 hours

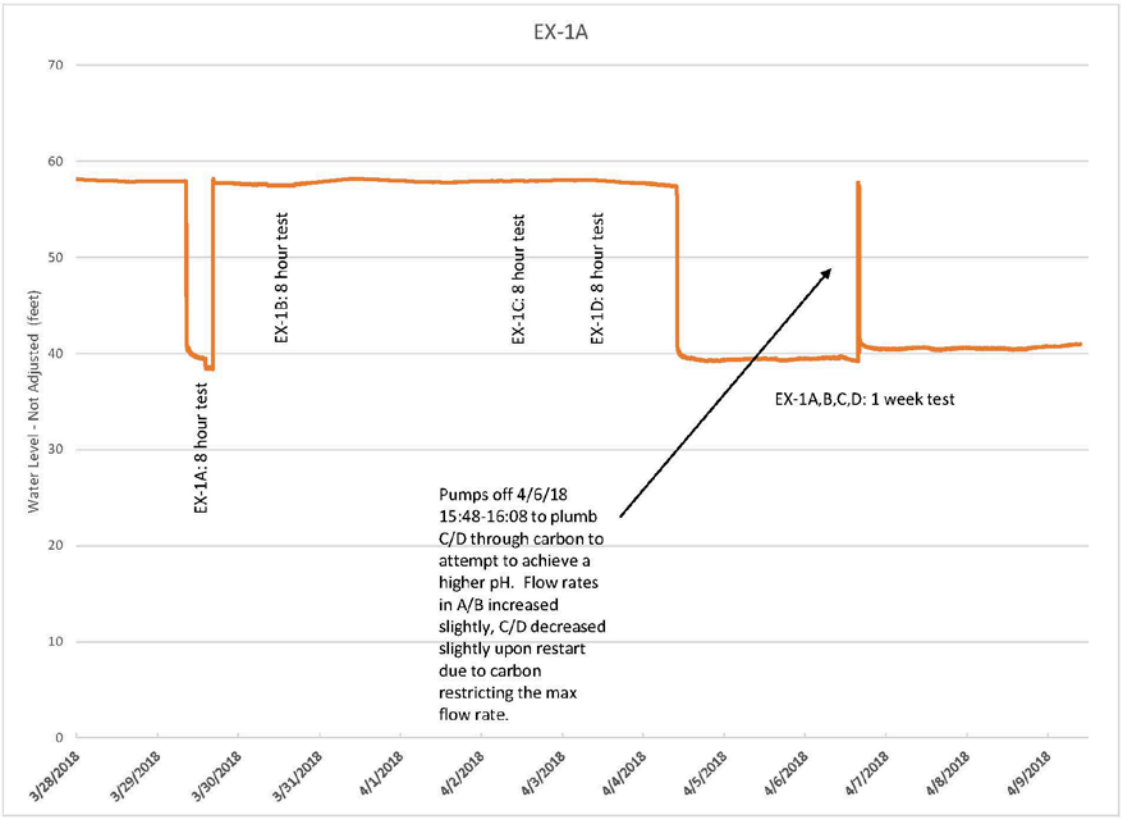
Wednesday, April 4 10:00 AM through Wednesday, April, 11, 2018 10:00 AM

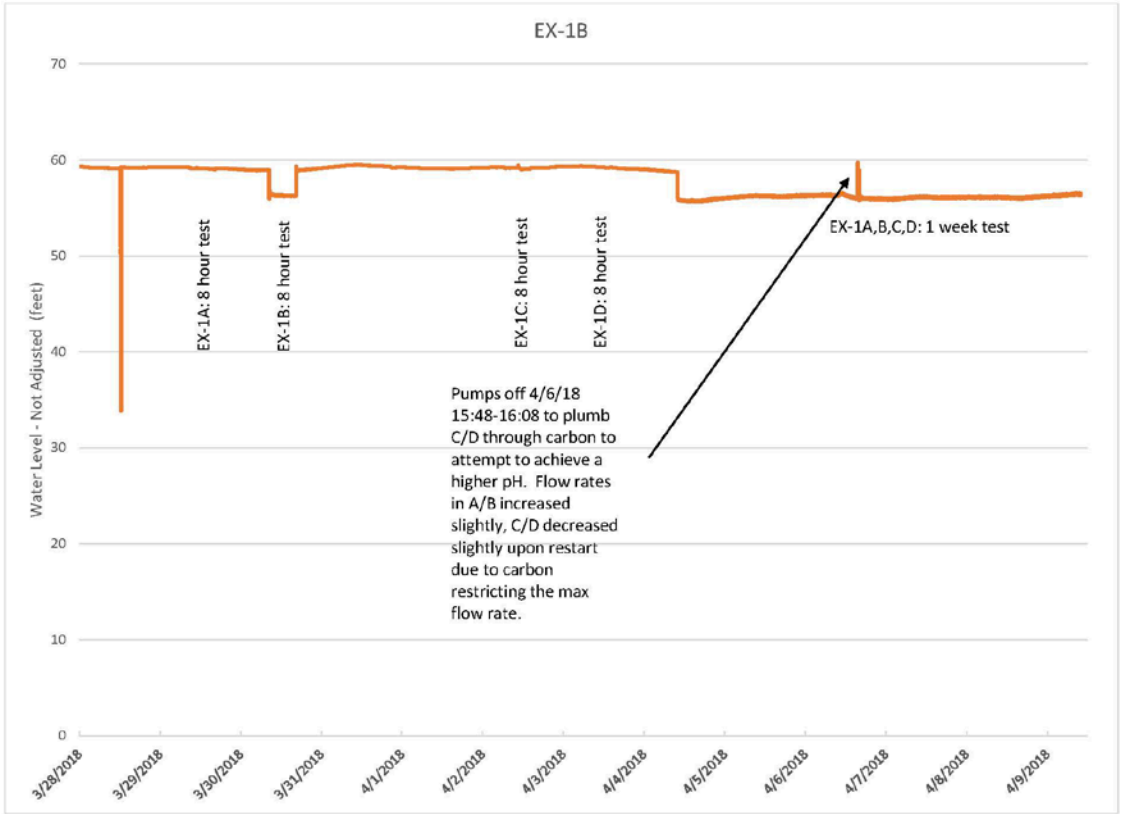
- Test EX-1A, B, C, and D at design flow rates for one week – wells sustained flow rate for duration of test

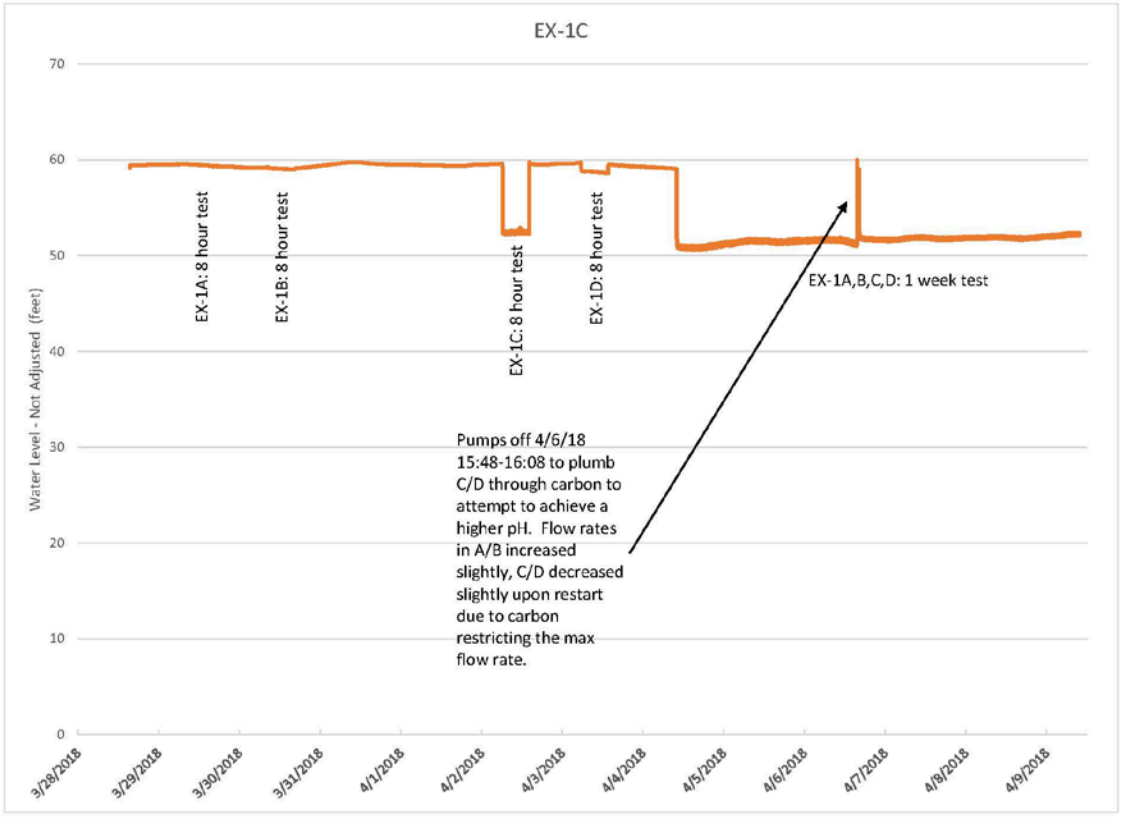
Wednesday, April 11, 2018 through Friday, April 13, 2018

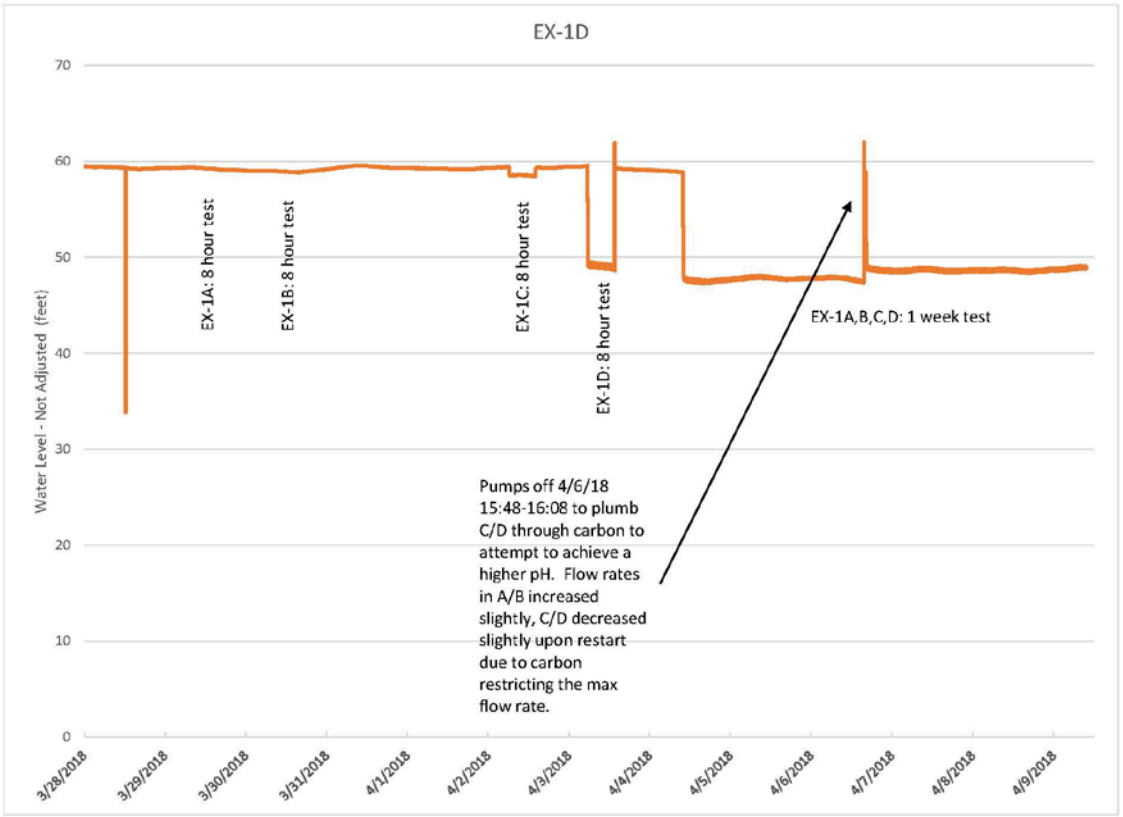
- System off for one week
- System will remain off until Wednesday, April 18, 2018 at which time EX-1A will be tested for one week at design flow rate (30 gpm)

The dataloggers were downloaded on Monday, April 9, 2018; a response graph for each extraction well during the pump test is provided below (including the testing of EX-1A and EX-1B also presented in the previous summary report). It should be noted that the individual well graphs provided have not been adjusted for actual groundwater depth or elevation, but rather to provide an idea of relative change, drawdown, and pumping sustainability. Overall, the wells responded quickly to pumping and sustained the design flow rates and subsequent drawdowns.

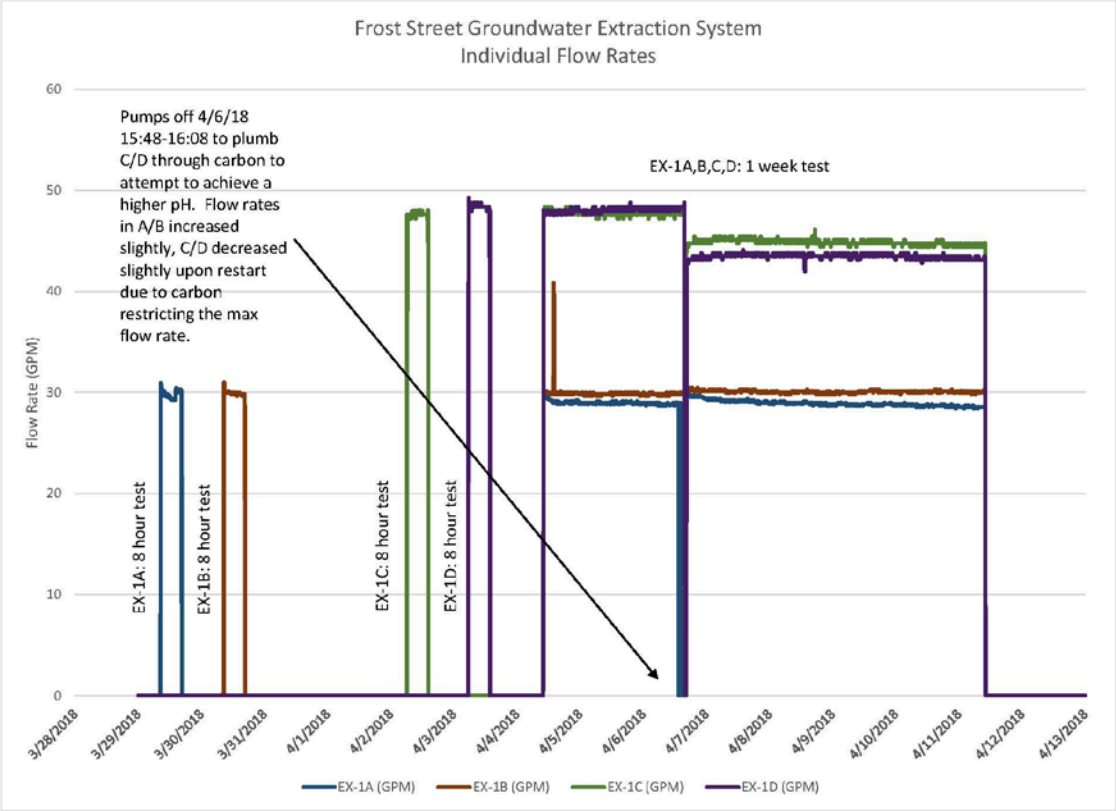

EX-1A
Water Level - Not Adjusted (feet)
70
60
50
40
30
20
10
0
3/28/2018
3/29/2018
3/30/2018
3/31/2018
4/1/2018
4/2/2018
4/3/2018
4/4/2018
4/5/2018
4/6/2018
4/7/2018
4/8/2018
4/9/2018
EX-1A: 8 hour test
EX-1B: 8 hour test
EX-1C: 8 hour test
EX-1D: 8 hour test
EX-1A,B,C,D: 1 week test
Pumps off 4/6/18 15:48-16:08 to plumb C/D through carbon to attempt to achieve a higher pH. Flow rates in A/B increased slightly, C/D decreased slightly upon restart due to carbon restricting the max flow rate.

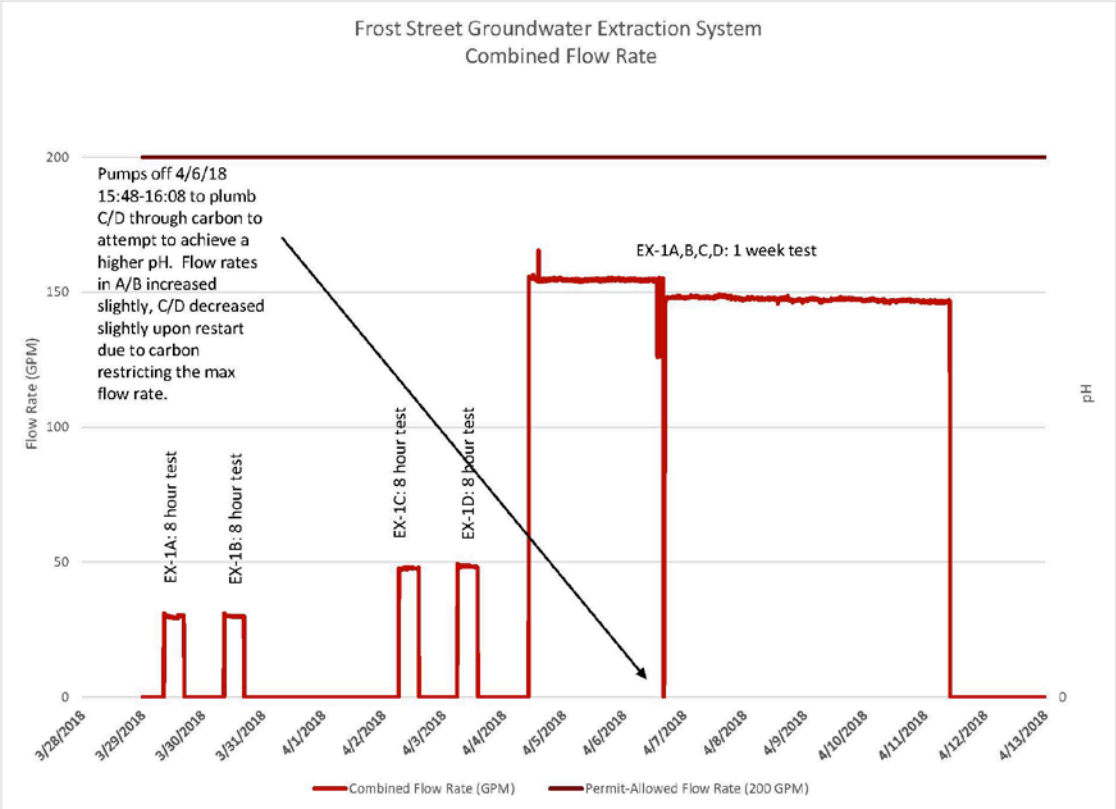

EX-1B
Water Level - Not Adjusted (feet)
70
60
50
40
30
20
10
0
3/28/2018
3/29/2018
3/30/2018
3/31/2018
4/1/2018
4/2/2018
4/3/2018
4/4/2018
4/5/2018
4/6/2018
4/7/2018
4/8/2018
4/9/2018
EX-1A: 8 hour test
EX-1B: 8 hour test
EX-1C: 8 hour test
EX-1D: 8 hour test
EX-1A,B,C,D: 1 week test
Pumps off 4/6/18 15:48-16:08 to plumb C/D through carbon to attempt to achieve a higher pH. Flow rates in A/B increased slightly, C/D decreased slightly upon restart due to carbon restricting the max flow rate.

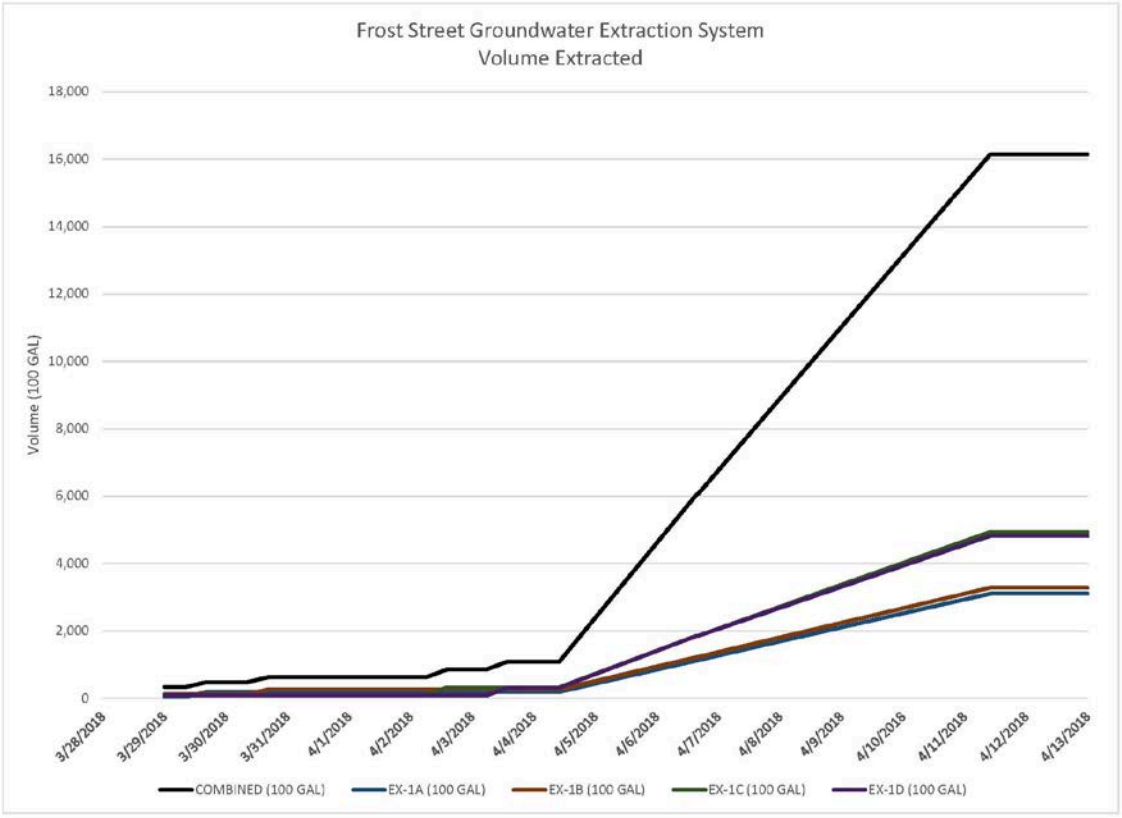

EX-1C
Water Level - Not Adjusted (feet)
70
60
50
40
30
20
10
0
EX-1A: 8 hour test
EX-1B: 8 hour test
EX-1C: 8 hour test
EX-1D: 8 hour test
EX-1A,B,C,D: 1 week test
Pumps off 4/6/18 15:48-16:08 to plumb C/D through carbon to attempt to achieve a higher pH. Flow rates in A/B increased slightly, C/D decreased slightly upon restart due to carbon restricting the max flow rate.
3/28/2018
3/29/2018
3/30/2018
3/31/2018
4/1/2018
4/2/2018
4/3/2018
4/4/2018
4/5/2018
4/6/2018
4/7/2018
4/8/2018
4/9/2018


EX-1D
Water Level - Not Adjusted (feet)
70
60
50
40
30
20
10
0
EX-1A: 8 hour test
EX-1B: 8 hour test
EX-1C: 8 hour test
EX-1D: 8 hour test
EX-1A,B,C,D: 1 week test
Pumps off 4/6/18 15:48-16:08 to plumb C/D through carbon to attempt to achieve a higher pH. Flow rates in A/B increased slightly, C/D decreased slightly upon restart due to carbon restricting the max flow rate.
3/28/2018
3/29/2018
3/30/2018
3/31/2018
4/1/2018
4/2/2018
4/3/2018
4/4/2018
4/5/2018
4/6/2018
4/7/2018
4/8/2018
4/9/2018

The graphs below present a summary of the system operational data (flow rates and total volume extraction) during Phase I of the pump test.






Frost Street Groundwater Extraction System
Volume Extracted
Volume (100 GAL)
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
3/28/2018
3/29/2018
3/30/2018
3/31/2018
4/1/2018
4/2/2018
4/3/2018
4/4/2018
4/5/2018
4/6/2018
4/7/2018
4/8/2018
4/9/2018
4/10/2018
4/11/2018
4/12/2018
4/13/2018
COMBINED (100 GAL)
EX-1A (100 GAL)
EX-1B (100 GAL)
EX-1C (100 GAL)
EX-1D (100 GAL)

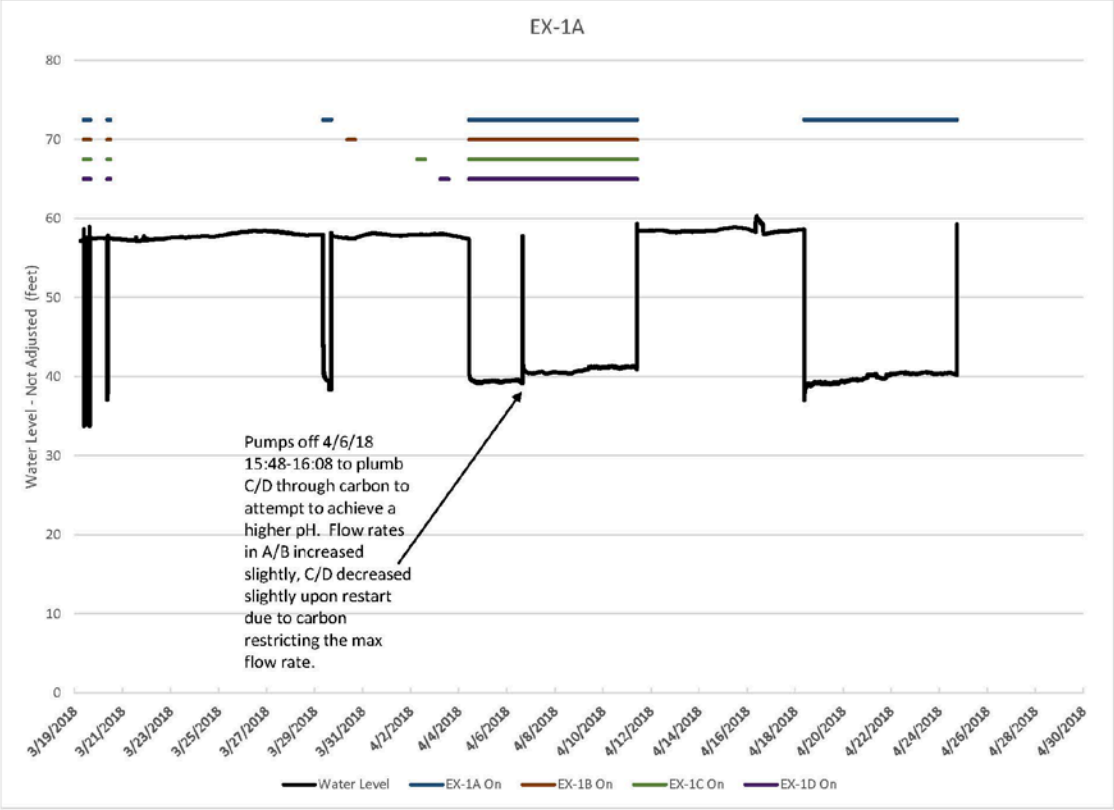
Frost Street Sites
Groundwater Extraction Hydraulic Containment
Summary Report
Saturday, April 14 through Monday, April 30, 2018

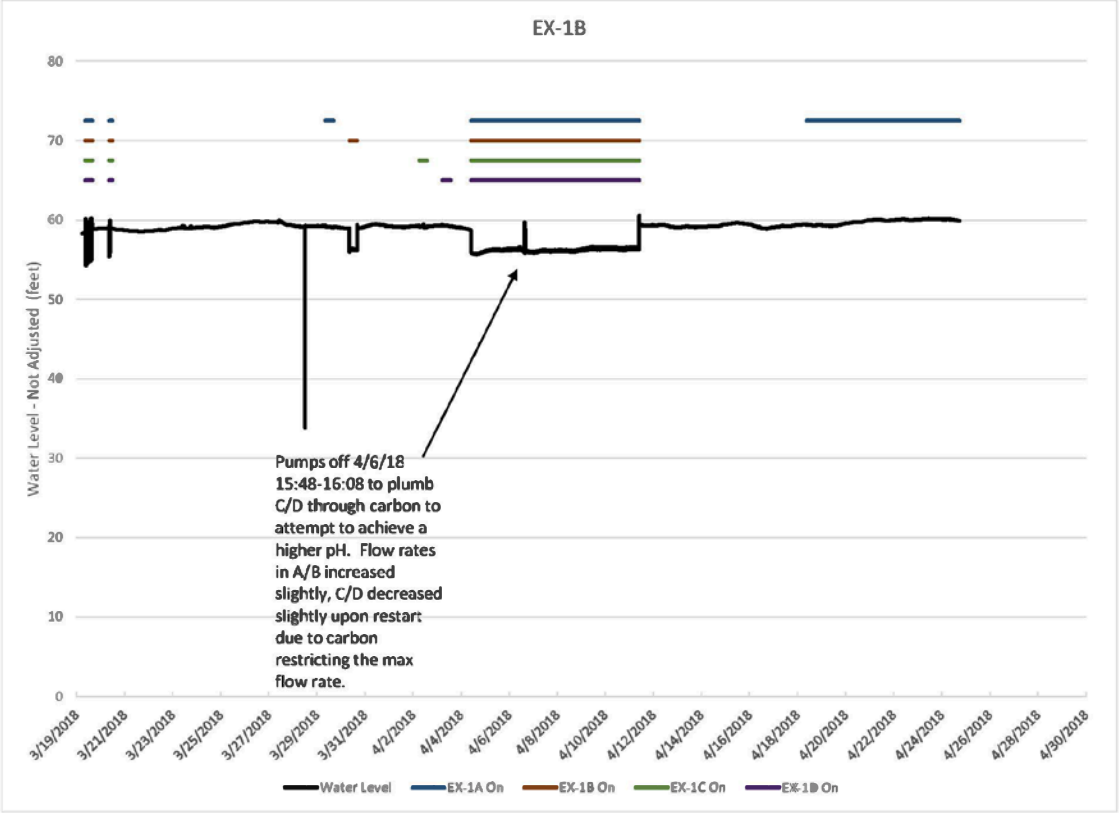
Phase II of the pump test began.

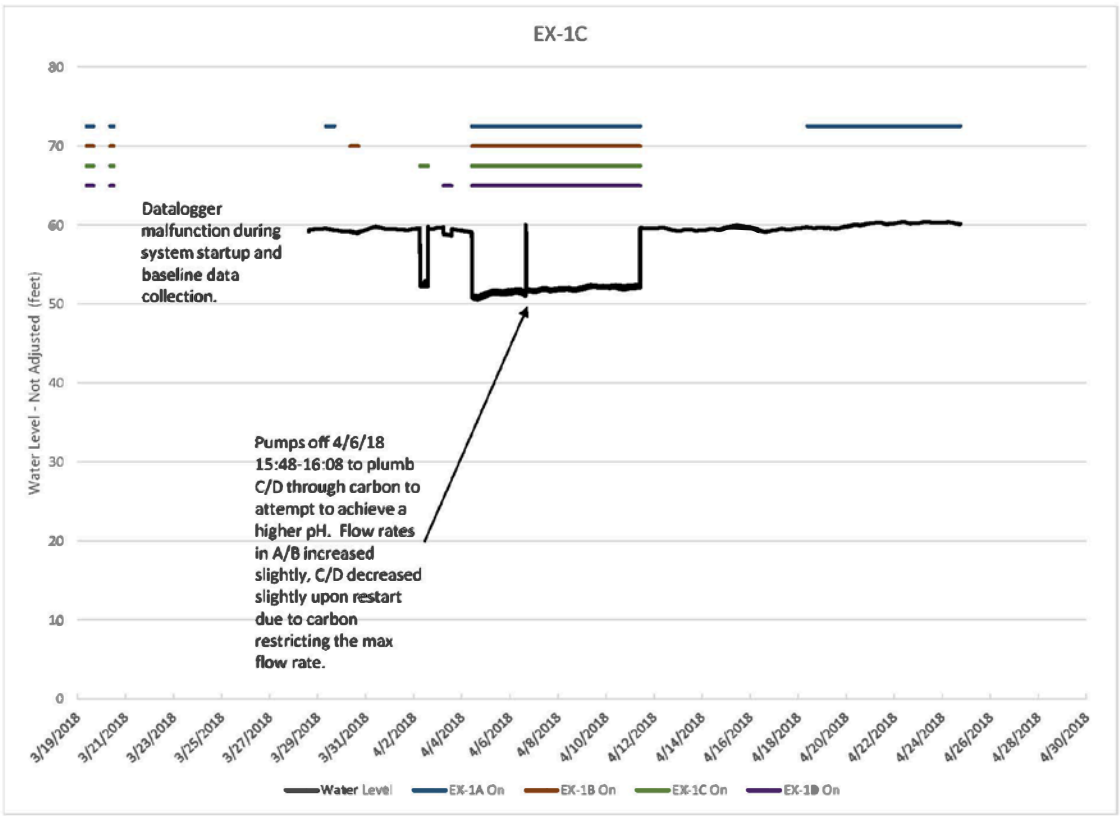
The system was off from Wednesday, April 11 at 10:00 AM through Wednesday, April 18 at 9:18 AM, to allow the aquifer to stabilize from Phase I of the test. On Wednesday, April 18 at 9:18 AM, EX-1A was turned on at the design flow rate of 30 gpm. Pertinent details are provided below.

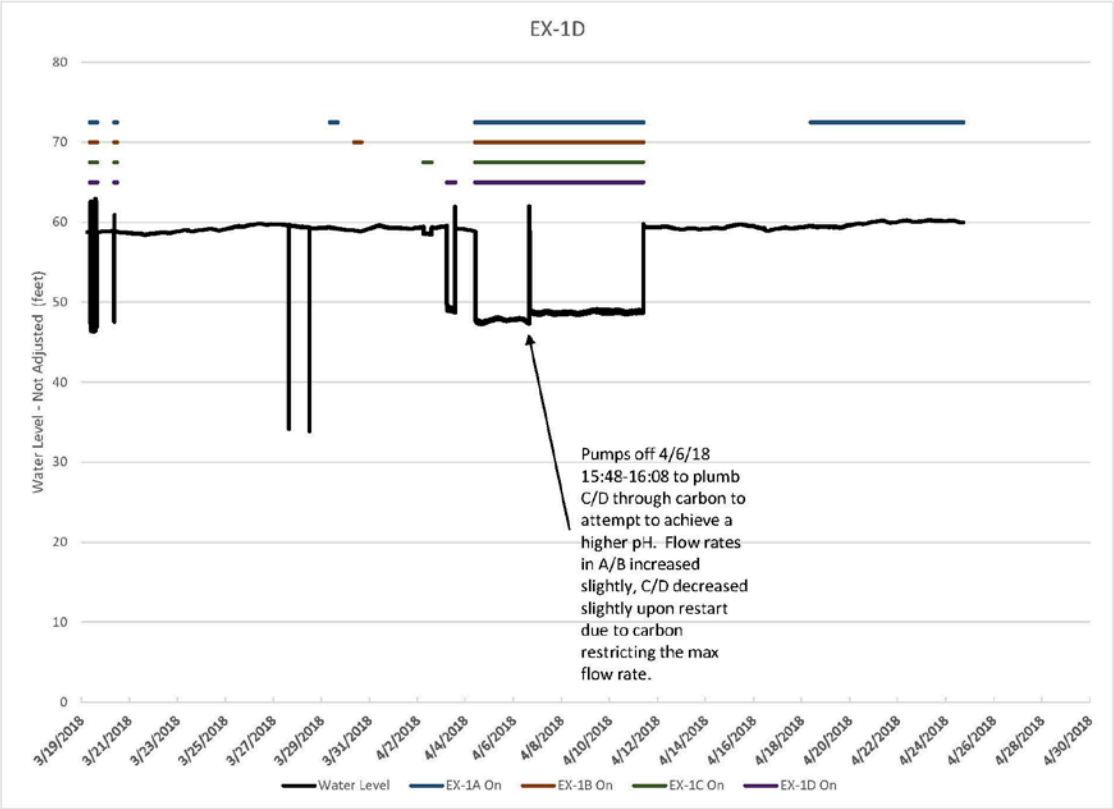
- EX-1A sustained the flow rate for the duration of the test.
- Due to an alarm, the test was stopped and the pump in EX-1A shut off on Tuesday, April 24 at 5:39 PM. This is approximately 16 hours earlier than the intended stop, trigged by an "Emergency Stop" alarm at the panel of unknown origin. Troublshooting the following day noted no issues with the pump or system.

The dataloggers were downloaded on Monday, April 16 and Monday, April 24, 2018. A response graph for each extraction well during the pump test to date is provided below (including Phase I of the test). It should be noted that the individual well graphs provided have not been adjusted for actual groundwater depth or elevation, but rather to provide an idea of relative change, drawdown, and pumping sustainability.

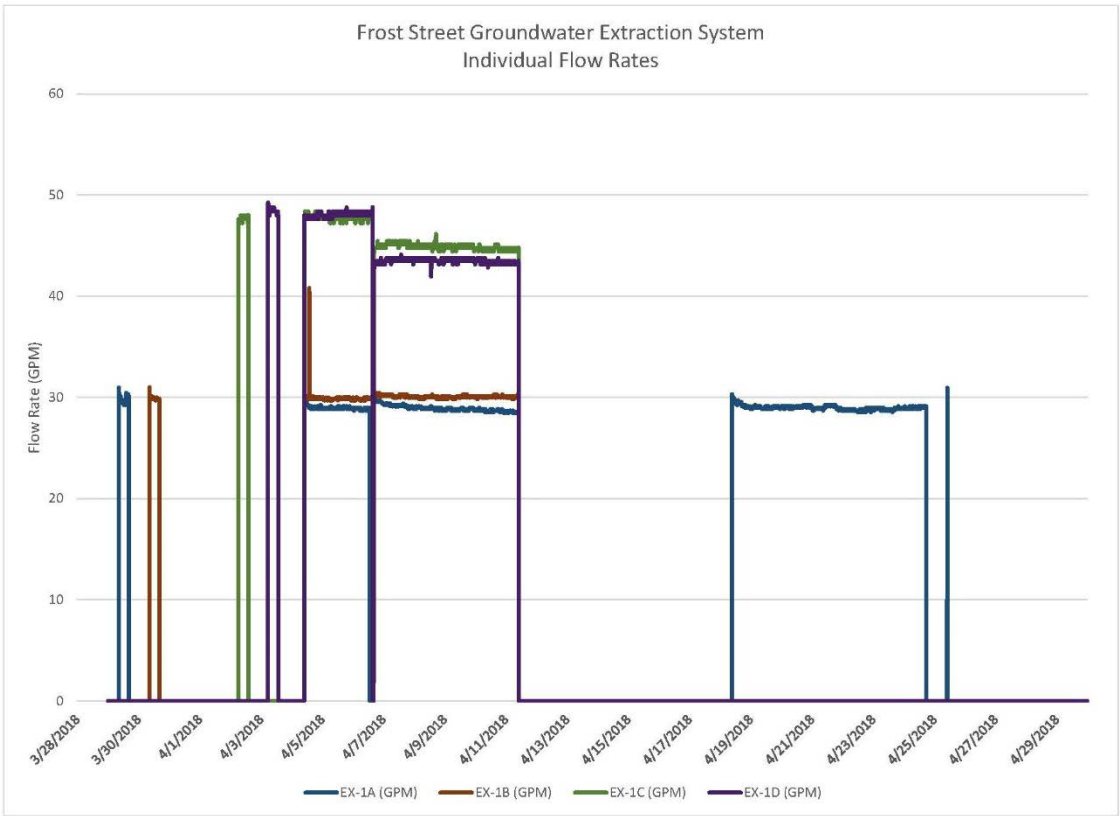


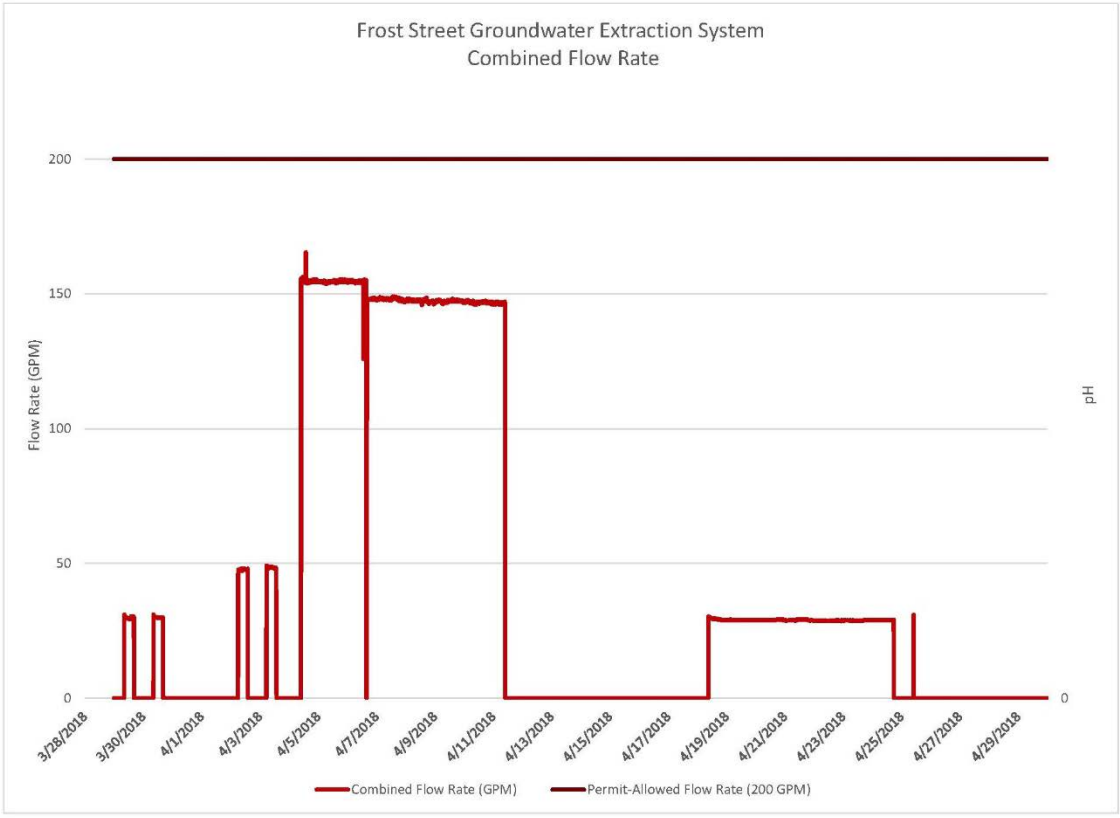

EX-1B
Water Level - Not Adjusted (feet)
Pumps off 4/6/18 15:48-16:08 to plumb C/D through carbon to attempt to achieve a higher pH. Flow rates in A/B increased slightly, C/D decreased slightly upon restart due to carbon restricting the max flow rate.
Water Level
EX-1A On
EX-1B On
EX-1C On
EX-1D On

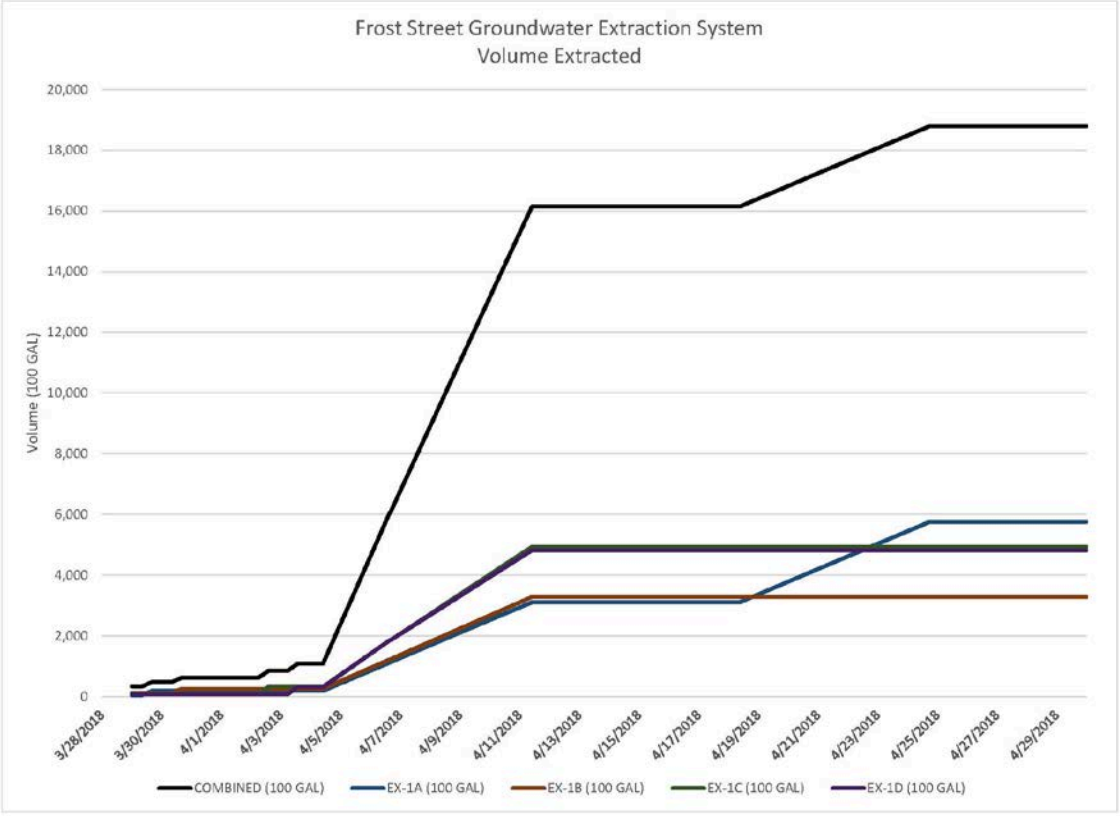

EX-1C
Water Level - Not Adjusted (feet)
Datalogger malfunction during system startup and baseline data collection.
Pumps off 4/6/18 15:48-16:08 to plumb C/D through carbon to attempt to achieve a higher pH. Flow rates in A/B increased slightly, C/D decreased slightly upon restart due to carbon restricting the max flow rate.
Water Level
EX-1A On
EX-1B On
EX-1C On
EX-1D On



The graphs below present a summary of the system operational data (flow rates and total volume extraction) during the pump test to date (including Phase I of the test).




Frost Street Groundwater Extraction System
Combined Flow Rate
Flow Rate (GPM)
pH
200
150
100
50
0
0
3/28/2018
3/30/2018
4/1/2018
4/3/2018
4/5/2018
4/7/2018
4/9/2018
4/11/2018
4/13/2018
4/15/2018
4/17/2018
4/19/2018
4/21/2018
4/23/2018
4/25/2018
4/27/2018
4/29/2018
Combined Flow Rate (GPM)
Permit-Allowed Flow Rate (200 GPM)


Frost Street Groundwater Extraction System
Volume Extracted
Volume (100 GAL)
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
3/28/2018
3/30/2018
4/1/2018
4/3/2018
4/5/2018
4/7/2018
4/9/2018
4/11/2018
4/13/2018
4/15/2018
4/17/2018
4/19/2018
4/21/2018
4/23/2018
4/25/2018
4/27/2018
4/29/2018
COMBINED (100 GAL)
EX-1A (100 GAL)
EX-1B (100 GAL)
EX-1C (100 GAL)
EX-1D (100 GAL)