ENSAFE
a global professional services company
creative thinking. **custom solutions.®**

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

Via email to Jeffrey.dyber@dec.ny.gov

November 14, 2017

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

Re: Progress Report: October 2017 – Revised
Frost Street Sites: Site ID #s 1-30043 I, L, M
New Cassel Industrial Area, Westbury, New York

Dear Mr. Dyber:

EnSafe Inc. is pleased to submit this revised Progress Report for the Frost Street Sites (Site ID #s 1-30043 I, L, M) for work completed in October 2017.

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** [revised]). The system was down for approximately 3 days due to a power failure.
- Quantitative sampling of the SVE system granular activated carbon influent and effluent air flow was conducted after the carbon exchange, on October 13, 2017, using Summa canisters. These samples were obtained by EnviroTrac, submitted to Phoenix Environmental Laboratories, and analyzed by Method TO-15. Results are included in **Appendix B**.
    - Influent concentrations of Frost Street-related contaminants of concern (tetrachloroethene, trichloroethene, cis-1,2-dichloroethene, and vinyl chloride) continue to indicate significant mass extraction. Photoionization detector readings between the lead and lag activated carbon media vessels and in the effluent air stream exhibit 0.0 parts per million total volatile organic compounds.
    - Effluent concentrations are well below the allowable limits, as shown in the table below.

Frost Street Sites Effluent Compliance			
System Flow Rate =		800	ft^3/m
Compound	**Annual Mass Emission Limit (lbs/year)**	**Allowable Continuous Annual Concentration ($\mu g/m^3$)**	**October 2017 Effluent Concentration ($\mu g/m^3$)**
Trichloroethene	500	19,000	44.1
Tetrachloroethene	1,000	38,000	84.1
Vinyl Chloride	100	3,800	ND
Cis-1,2-Dichloroethene	100	3,800	1,100

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)

- Construction continued on the groundwater extraction/hydraulic contaminant system. Activities this month included:
    - System vault and electrical service installation
    - Additional extraction well development
- Additional details and photographs regarding these activities can be found in the previously submitted daily summary reports, included as **Appendix C**.
- The Frost Street Parties acknowledge receipt of NYSDEC disapproval of the letter work plan *Groundwater Extraction/Hydraulic Containment – Additional Sampling, Review, and Schedule Implications* submitted by EnSafe to NYSDEC on November 1, 2017. A formal response to the NYSDEC disapproval letter is forthcoming.
    - That said, sampling began as described in the letter work plan (FSMW-8A/B, FSMW-19A/B/C/D, and EX-1A/B/C/D) on November 6, 2017 based on verbal approval on the sampling portion of the letter work plan received from NYSDEC during a telephone call on November 1, 2017.
    - During sampling activities on November 10, 2017 in EX-1B, there were difficulties dropping the 1-inch sampling pump down the extraction well (it was caught at approximately 112 feet bgs) and sediment was being pumped out of the well near the bottom of the well screen.
    - As a result of these difficulties, additional reconnaissance (video and driller inspection) will be performed on this and the other three extraction wells on Monday, November 13, 2017.

Quarterly/Annual Groundwater Monitoring

- The third quarter 2017 groundwater sampling event was completed the week of September 25, 2017. Results will be submitted in 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: 4-Oct
Weather / Temp: Clear / 70 DEG
Technician / Operator: DW

Arrival Time: 13:00
Departure Time: 15:00

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

Soil Vapor Extraction System				
Blower Air Velocity/Flow Rate (fpm)/(cfm)	4000	785	Blower 1 Total Runtime (hrs)	48,352.5
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	48,204.5
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0
Moisture Separator Vacuum ("Hg)	2.5		Blower 2 Air Filter Differential Pressure ("H2O)	0
VGAC-1 Influent Vacuum ("H2O)	58		VGAC-1 Influent PID (ppm)	5.3
VGAC-1 Effluent Vacuum ("H2O)	48		VGAC-1 Effluent PID (ppm)	0.0
VGAC-2 Influent Vacuum ("H2O)	42		VGAC-2 Influent PID (ppm)	5.3
VGAC-2 Effluent Vacuum ("H2O)	42		VGAC-2 Effluent PID (ppm)	0.0
VGAC-3 Influent Vacuum ("H2O)	42		VGAC-3 Influent PID (ppm)	0.0
VGAC-3 Effluent Vacuum ("H2O)	48		VGAC-3 Effluent PID (ppm)	0.0
Blower Effluent Temp (DegF)	NA		Blower Effluent PID (ppm)	0.0
Blower Effluent Pressure ("H2O)	4.5			
Transfer Pump Total Runtime (hrs)	25,026.0		Condensate Storage Tank Level (gal)	100

SVE Manifold Legs - Vacuum/Flow Rate/PID									
	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	36	6000	131		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	28	3600	79	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	38	2400	52		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	28	2500	55	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	29	4200	92		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	28	5000	109	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	26	3600	79		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	30	2600	57	

Air Sparge System			
Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	84
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	180
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	24,073
Manifold Regulator Pressure (psi)	80		

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

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: 13-Oct
Weather / Temp: Clear / 60 DEG
Technician / Operator: DW

Arrival Time: 13:00
Departure Time: 15:00

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)	4200	825	Blower 1 Total Runtime (hrs)	48,460.7
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	48,312.3
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0
Moisture Separator Vacuum ("Hg)	2.5		Blower 2 Air Filter Differential Pressure ("H2O)	0
VGAC-1 Influent Vacuum ("H2O)	58		VGAC-1 Influent PID (ppb)	7850
VGAC-1 Effluent Vacuum ("H2O)	48		VGAC-1 Effluent PID (ppb)	240
VGAC-2 Influent Vacuum ("H2O)	42		VGAC-2 Influent PID (ppb)	7850
VGAC-2 Effluent Vacuum ("H2O)	42		VGAC-2 Effluent PID (ppb)	500
VGAC-3 Influent Vacuum ("H2O)	42		VGAC-3 Influent PID (ppb)	100
VGAC-3 Effluent Vacuum ("H2O)	46		VGAC-3 Effluent PID (ppb)	260
Blower Effluent Temp (DegF)	NA		Blower Effluent PID (ppb)	270
Blower Effluent Pressure ("H2O)	4.5			
Transfer Pump Total Runtime (hrs)	25,026.0		Condensate Storage Tank Level (gal)	100

SVE Manifold Legs - Vacuum/Flow Rate/PID

	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppb)	36	6000	131	1,500	SVE-4 ("H2O)/(FPM)/(cfm)/(ppb)	28	3600	79	400
SVE-2 ("H2O)/(FPM)/(cfm)/(ppb)	38	2500	55	8,120	SVE-5 ("H2O)/(FPM)/(cfm)/(ppb)	28	2500	55	416
SVE-3 ("H2O)/(FPM)/(cfm)/(ppb)	30	4200	92	3,780	SVE-6B ("H2O)/(FPM)/(cfm)/(ppb)	28	5000	109	20,300
SVE-3A ("H2O)/(FPM)/(cfm)/(ppb)	28	3600	79	300	SVE-7 ("H2O)/(FPM)/(cfm)/(ppb)	30	2600	57	80

Air Sparge System

Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	89
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	176
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	24,282
Manifold Regulator Pressure (psi)	85		

AS Manifold Legs - Pressure/Flow Rate

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

Notes, Comments & Observations:

All PID measurements recorded in ppb.

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-Oct
Weather / Temp: Clear / 70 DEG
Technician / Operator: DW

Arrival Time: 12:30
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)	ON	ON			

Soil Vapor Extraction System

Blower Air Velocity/Flow Rate (fpm)/(cfm)	4400	864	Blower 1 Total Runtime (hrs)	48,533.4
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	48,386.0
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0
Moisture Separator Vacuum ("Hg)	3		Blower 2 Air Filter Differential Pressure ("H2O)	0
VGAC-1 Influent Vacuum ("H2O)	44		VGAC-1 Influent PID (ppm)	6
VGAC-1 Effluent Vacuum ("H2O)	44		VGAC-1 Effluent PID (ppm)	0
VGAC-2 Influent Vacuum ("H2O)	48		VGAC-2 Influent PID (ppm)	6
VGAC-2 Effluent Vacuum ("H2O)	48		VGAC-2 Effluent PID (ppm)	0
VGAC-3 Influent Vacuum ("H2O)	42		VGAC-3 Influent PID (ppm)	0
VGAC-3 Effluent Vacuum ("H2O)	46		VGAC-3 Effluent PID (ppm)	0
Blower Effluent Temp (DegF)	NA		Blower Effluent PID (ppm)	0
Blower Effluent Pressure ("H2O)	4.5			
Transfer Pump Total Runtime (hrs)	25,026.0		Condensate Storage Tank Level (gal)	100

SVE Manifold Legs - Vacuum/Flow Rate/PID

	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	36	6000	131		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	30	3800	83	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	38	3500	76		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	30	2600	57	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	30	4200	92		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	30	5500	120	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	28	3600	79		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	32	2700	59	

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)	187
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	24,435
Manifold Regulator Pressure (psi)	85		

AS Manifold Legs - Pressure/Flow Rate

	Pressure	Flow Rate		Pressure	Flow Rate
AS-1 (psi)/(cfm)	15	11	AS-11 (psi)/(cfm)	13	4
AS-2 (psi)/(cfm)	13	7	AS-12B (psi)/(cfm)	13	9
AS-3 (psi)/(cfm)	13	6	AS-13B (psi)/(cfm)	13	10
AS-4 (psi)/(cfm)	13	10	AS-14 (psi)/(cfm)	13	10
AS-5 (psi)/(cfm)	14	8	AS-15 (psi)/(cfm)	13	11
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)	14	10	AS-18 (psi)/(cfm)	11	6
AS-9 (psi)/(cfm)	15	10	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: 26-Oct
Weather / Temp: Clear / 70 DEG
Technician / Operator: DW

Arrival Time: 12:30
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)	ON	ON			

Soil Vapor Extraction System

Blower Air Velocity/Flow Rate (fpm)/(cfm)	4200	825	Blower 1 Total Runtime (hrs)	48,617.3
Blower 1 Fresh Air Valve Open (%)	0		Blower 2 Total Runtime (hrs)	48,469.2
Blower 2 Fresh Air Valve Open (%)	0		Blower 1 Air Filter Differential Pressure ("H2O)	0
Moisture Separator Vacuum ("Hg)	2.5		Blower 2 Air Filter Differential Pressure ("H2O)	0
VGAC-1 Influent Vacuum ("H2O)	58		VGAC-1 Influent PID (ppm)	5.4
VGAC-1 Effluent Vacuum ("H2O)	50		VGAC-1 Effluent PID (ppm)	0
VGAC-2 Influent Vacuum ("H2O)	44		VGAC-2 Influent PID (ppm)	5.4
VGAC-2 Effluent Vacuum ("H2O)	42		VGAC-2 Effluent PID (ppm)	0
VGAC-3 Influent Vacuum ("H2O)	45		VGAC-3 Influent PID (ppm)	0
VGAC-3 Effluent Vacuum ("H2O)	48		VGAC-3 Effluent PID (ppm)	0
Blower Effluent Temp (DegF)	NA		Blower Effluent PID (ppm)	0
Blower Effluent Pressure ("H2O)	4.5			
Transfer Pump Total Runtime (hrs)	25,026.0		Condensate Storage Tank Level (gal)	100

SVE Manifold Legs - Vacuum/Flow Rate/PID

	Vacuum	Velocity	Flow Rate	PID		Vacuum	Velocity	Flow Rate	PID
SVE-1 ("H2O)/(FPM)/(cfm)/(ppm)	36	6000	131		SVE-4 ("H2O)/(FPM)/(cfm)/(ppm)	28	3600	79	
SVE-2 ("H2O)/(FPM)/(cfm)/(ppm)	38	3000	65		SVE-5 ("H2O)/(FPM)/(cfm)/(ppm)	28	2600	57	
SVE-3 ("H2O)/(FPM)/(cfm)/(ppm)	30	4200	92		SVE-6B ("H2O)/(FPM)/(cfm)/(ppm)	28	5000	109	
SVE-3A ("H2O)/(FPM)/(cfm)/(ppm)	26	3600	79		SVE-7 ("H2O)/(FPM)/(cfm)/(ppm)	30	2600	57	

Air Sparge System

Compressor 1 Pressure (psi)	Off for repairs	Compressor 2 Pressure (psi)	89
Compressor 1 Temperature (degF)	Off for repairs	Compressor 2 Temperature (degF)	175
Compressor 1 Runtime (hrs)	27,317	Compressor 2 Runtime (hrs)	24,529
Manifold Regulator Pressure (psi)	85		

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)	14	9
AS-3 (psi)/(cfm)	13	6	AS-13B (psi)/(cfm)	1	9
AS-4 (psi)/(cfm)	13	7	AS-14 (psi)/(cfm)	14	10
AS-5 (psi)/(cfm)	14	8	AS-15 (psi)/(cfm)	14	11
AS-6 (psi)/(cfm)	15	8	AS-16B (psi)/(cfm)	13	10
AS-7 (psi)/(cfm)	14	4	AS-17 (psi)/(cfm)	14	5
AS-8 (psi)/(cfm)	14	10	AS-18 (psi)/(cfm)	12	6
AS-9 (psi)/(cfm)	15	10	AS-19 (psi)/(cfm)	13	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
10/20/2017	10/23/2017	DW	Power Alarm.	Restarted Compressor.	ON	ON

Appendix B

SVE System Influent/Effluent Sampling (TO-15)

Laboratory Analytical Results

PHOENIX
Environmental Laboratories, Inc.

Friday, October 20, 2017

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

Project ID: ENSAFE-WESTBURY
Sample ID#s: BZ22465 - BZ22466

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
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

October 20, 2017

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

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	DW	10/13/17	11:06
Location Code:	ENVIROTR	Received by:	SW	10/17/17	16:30
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	745				

Laboratory Data

SDG ID: GBZ22465
Phoenix ID: BZ22465

Project ID: ENSAFE-WESTBURY
Client ID: 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*	10/17/17	KCA	1	1
1,1,1-Trichloroethane	1.00		*0.183*	5.45	*1.00*	10/17/17	KCA	1	
1,1,2,2-Tetrachloroethane	ND		*0.146*	ND	*1.00*	10/17/17	KCA	1	
1,1,2-Trichloroethane	ND		*0.183*	ND	*1.00*	10/17/17	KCA	1	
1,1-Dichloroethane	ND		*0.247*	ND	*1.00*	10/17/17	KCA	1	
1,1-Dichloroethene	ND		*0.051*	ND	*0.20*	10/17/17	KCA	1	
1,2,4-Trichlorobenzene	ND		*0.135*	ND	*1.00*	10/17/17	KCA	1	
1,2,4-Trimethylbenzene	ND		*0.204*	ND	*1.00*	10/17/17	KCA	1	
1,2-Dibromoethane(EDB)	ND		*0.130*	ND	*1.00*	10/17/17	KCA	1	
1,2-Dichlorobenzene	ND		*0.166*	ND	*1.00*	10/17/17	KCA	1	
1,2-Dichloroethane	ND		*0.247*	ND	*1.00*	10/17/17	KCA	1	
1,2-dichloropropane	ND		*0.217*	ND	*1.00*	10/17/17	KCA	1	
1,2-Dichlorotetrafluoroethane	ND		*0.143*	ND	*1.00*	10/17/17	KCA	1	
1,3,5-Trimethylbenzene	ND		*0.204*	ND	*1.00*	10/17/17	KCA	1	
1,3-Butadiene	ND		*0.452*	ND	*1.00*	10/17/17	KCA	1	
1,3-Dichlorobenzene	ND		*0.166*	ND	*1.00*	10/17/17	KCA	1	
1,4-Dichlorobenzene	ND		*0.166*	ND	*1.00*	10/17/17	KCA	1	
1,4-Dioxane	ND		*0.278*	ND	*1.00*	10/17/17	KCA	1	
2-Hexanone(MBK)	ND		*0.244*	ND	*1.00*	10/17/17	KCA	1	1
4-Ethyltoluene	ND		*0.204*	ND	*1.00*	10/17/17	KCA	1	1
4-Isopropyltoluene	ND		*0.182*	ND	*1.00*	10/17/17	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND		*0.244*	ND	*1.00*	10/17/17	KCA	1	
Acetone	1.87	S	*0.421*	4.44	*1.00*	10/17/17	KCA	1	
Acrylonitrile	ND		*0.461*	ND	*1.00*	10/17/17	KCA	1	
Benzene	ND		*0.313*	ND	*1.00*	10/17/17	KCA	1	
Benzyl chloride	ND		*0.193*	ND	*1.00*	10/17/17	KCA	1	

Project ID: ENSAFE-WESTBURY
Client ID: INFLUENT

Phoenix I.D.: BZ22465

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	ND	*1.00*	10/17/17	KCA	1	
Bromoform	ND	*0.097*	ND	*1.00*	10/17/17	KCA	1	
Bromomethane	ND	*0.258*	ND	*1.00*	10/17/17	KCA	1	
Carbon Disulfide	ND	*0.321*	ND	*1.00*	10/17/17	KCA	1	
Carbon Tetrachloride	0.082	*0.032*	0.52	*0.20*	10/17/17	KCA	1	
Chlorobenzene	0.392	*0.217*	1.80	*1.00*	10/17/17	KCA	1	
Chloroethane	ND	*0.379*	ND	*1.00*	10/17/17	KCA	1	
Chloroform	ND	*0.205*	ND	*1.00*	10/17/17	KCA	1	
Chloromethane	ND	*0.485*	ND	*1.00*	10/17/17	KCA	1	
Cis-1,2-Dichloroethene	195	*0.505*	773	*2.00*	10/18/17	KCA	10	
cis-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	10/17/17	KCA	1	
Cyclohexane	ND	*0.291*	ND	*1.00*	10/17/17	KCA	1	
Dibromochloromethane	ND	*0.118*	ND	*1.00*	10/17/17	KCA	1	
Dichlorodifluoromethane	0.589	*0.202*	2.91	*1.00*	10/17/17	KCA	1	
Ethanol	0.793	*0.531*	1.49	*1.00*	10/17/17	KCA	1	1
Ethyl acetate	ND	*0.278*	ND	*1.00*	10/17/17	KCA	1	1
Ethylbenzene	ND	*0.230*	ND	*1.00*	10/17/17	KCA	1	
Heptane	ND	*0.244*	ND	*1.00*	10/17/17	KCA	1	
Hexachlorobutadiene	ND	*0.094*	ND	*1.00*	10/17/17	KCA	1	
Hexane	ND	*0.284*	ND	*1.00*	10/17/17	KCA	1	
Isopropylalcohol	0.495	*0.407*	1.22	*1.00*	10/17/17	KCA	1	
Isopropylbenzene	ND	*0.204*	ND	*1.00*	10/17/17	KCA	1	
m,p-Xylene	ND	*0.230*	ND	*1.00*	10/17/17	KCA	1	
Methyl Ethyl Ketone	ND	*0.339*	ND	*1.00*	10/17/17	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	ND	*1.00*	10/17/17	KCA	1	
Methylene Chloride	ND	*0.864*	ND	*3.00*	10/17/17	KCA	1	
n-Butylbenzene	ND	*0.182*	ND	*1.00*	10/17/17	KCA	1	1
o-Xylene	ND	*0.230*	ND	*1.00*	10/17/17	KCA	1	
Propylene	ND	*0.581*	ND	*1.00*	10/17/17	KCA	1	1
sec-Butylbenzene	ND	*0.182*	ND	*1.00*	10/17/17	KCA	1	1
Styrene	ND	*0.235*	ND	*1.00*	10/17/17	KCA	1	
Tetrachloroethene	3530	*4.61*	23900	*31.2*	10/18/17	KCA	125	
Tetrahydrofuran	ND	*0.339*	ND	*1.00*	10/17/17	KCA	1	1
Toluene	ND	*0.266*	ND	*1.00*	10/17/17	KCA	1	
Trans-1,2-Dichloroethene	2.93	*0.252*	11.6	*1.00*	10/17/17	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	10/17/17	KCA	1	
Trichloroethene	300	*0.372*	1610	*2.00*	10/18/17	KCA	10	
Trichlorofluoromethane	0.319	*0.178*	1.79	*1.00*	10/17/17	KCA	1	
Trichlorotrifluoroethane	ND	*0.131*	ND	*1.00*	10/17/17	KCA	1	
Vinyl Chloride	ND	*0.078*	ND	*0.20*	10/17/17	KCA	1	
QA/QC Surrogates								
% Bromofluorobenzene	110	*%*	110	*%*	10/17/17	KCA	1	

Project ID: ENSAFE-WESTBURY
Client ID: INFLUENT

Phoenix I.D.: BZ22465

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
October 20, 2017
Reviewed and Released by: Ethan Lee, Project Manager

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

ACCREDITED IN ACCORDANCE WITH nelac NY # 11301

Analysis Report

October 20, 2017

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

Sample Information		Custody Information		Date	Time
Matrix:	AIR	Collected by:	DW	10/13/17	11:01
Location Code:	ENVIROTR	Received by:	SW	10/17/17	16:30
Rush Request:	72 Hour	Analyzed by:	see "By" below		
P.O.#:					
Canister Id:	841				

Laboratory Data

SDG ID: GBZ22465
Phoenix ID: BZ22466

Project ID: ENSAFE-WESTBURY
Client ID: 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*	10/17/17	KCA	1	1
1,1,1-Trichloroethane	0.281		*0.183*	1.53	*1.00*	10/17/17	KCA	1	
1,1,2,2-Tetrachloroethane	ND		*0.146*	ND	*1.00*	10/17/17	KCA	1	
1,1,2-Trichloroethane	ND		*0.183*	ND	*1.00*	10/17/17	KCA	1	
1,1-Dichloroethane	ND		*0.247*	ND	*1.00*	10/17/17	KCA	1	
1,1-Dichloroethene	0.284		*0.051*	1.13	*0.20*	10/17/17	KCA	1	
1,2,4-Trichlorobenzene	ND		*0.135*	ND	*1.00*	10/17/17	KCA	1	
1,2,4-Trimethylbenzene	ND		*0.204*	ND	*1.00*	10/17/17	KCA	1	
1,2-Dibromoethane(EDB)	ND		*0.130*	ND	*1.00*	10/17/17	KCA	1	
1,2-Dichlorobenzene	ND		*0.166*	ND	*1.00*	10/17/17	KCA	1	
1,2-Dichloroethane	ND		*0.247*	ND	*1.00*	10/17/17	KCA	1	
1,2-dichloropropane	ND		*0.217*	ND	*1.00*	10/17/17	KCA	1	
1,2-Dichlorotetrafluoroethane	ND		*0.143*	ND	*1.00*	10/17/17	KCA	1	
1,3,5-Trimethylbenzene	ND		*0.204*	ND	*1.00*	10/17/17	KCA	1	
1,3-Butadiene	ND		*0.452*	ND	*1.00*	10/17/17	KCA	1	
1,3-Dichlorobenzene	ND		*0.166*	ND	*1.00*	10/17/17	KCA	1	
1,4-Dichlorobenzene	ND		*0.166*	ND	*1.00*	10/17/17	KCA	1	
1,4-Dioxane	ND		*0.278*	ND	*1.00*	10/17/17	KCA	1	
2-Hexanone(MBK)	0.339		*0.244*	1.39	*1.00*	10/17/17	KCA	1	1
4-Ethyltoluene	ND		*0.204*	ND	*1.00*	10/17/17	KCA	1	1
4-Isopropyltoluene	ND		*0.182*	ND	*1.00*	10/17/17	KCA	1	1
4-Methyl-2-pentanone(MIBK)	ND		*0.244*	ND	*1.00*	10/17/17	KCA	1	
Acetone	3.67	S	*0.421*	8.71	*1.00*	10/17/17	KCA	1	
Acrylonitrile	ND		*0.461*	ND	*1.00*	10/17/17	KCA	1	
Benzene	ND		*0.313*	ND	*1.00*	10/17/17	KCA	1	
Benzyl chloride	ND		*0.193*	ND	*1.00*	10/17/17	KCA	1	

Project ID: ENSAFE-WESTBURY
Client ID: EFFLUENT

Phoenix I.D.: BZ22466

Parameter	ppbv Result	ppbv RL	ug/m3 Result	ug/m3 RL	Date/Time	By	Dilution	
Bromodichloromethane	ND	*0.149*	ND	*1.00*	10/17/17	KCA	1	
Bromoform	ND	*0.097*	ND	*1.00*	10/17/17	KCA	1	
Bromomethane	ND	*0.258*	ND	*1.00*	10/17/17	KCA	1	
Carbon Disulfide	ND	*0.321*	ND	*1.00*	10/17/17	KCA	1	
Carbon Tetrachloride	ND	*0.032*	ND	*0.20*	10/17/17	KCA	1	
Chlorobenzene	ND	*0.217*	ND	*1.00*	10/17/17	KCA	1	
Chloroethane	ND	*0.379*	ND	*1.00*	10/17/17	KCA	1	
Chloroform	0.345	*0.205*	1.68	*1.00*	10/17/17	KCA	1	
Chloromethane	ND	*0.485*	ND	*1.00*	10/17/17	KCA	1	
Cis-1,2-Dichloroethene	278	*0.505*	1100	*2.00*	10/17/17	KCA	10	
cis-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	10/17/17	KCA	1	
Cyclohexane	ND	*0.291*	ND	*1.00*	10/17/17	KCA	1	
Dibromochloromethane	ND	*0.118*	ND	*1.00*	10/17/17	KCA	1	
Dichlorodifluoromethane	0.676	*0.202*	3.34	*1.00*	10/17/17	KCA	1	
Ethanol	0.969	*0.531*	1.82	*1.00*	10/17/17	KCA	1	1
Ethyl acetate	ND	*0.278*	ND	*1.00*	10/17/17	KCA	1	1
Ethylbenzene	ND	*0.230*	ND	*1.00*	10/17/17	KCA	1	
Heptane	ND	*0.244*	ND	*1.00*	10/17/17	KCA	1	
Hexachlorobutadiene	ND	*0.094*	ND	*1.00*	10/17/17	KCA	1	
Hexane	ND	*0.284*	ND	*1.00*	10/17/17	KCA	1	
Isopropylalcohol	0.939	*0.407*	2.31	*1.00*	10/17/17	KCA	1	
Isopropylbenzene	ND	*0.204*	ND	*1.00*	10/17/17	KCA	1	
m,p-Xylene	0.272	*0.230*	1.18	*1.00*	10/17/17	KCA	1	
Methyl Ethyl Ketone	0.735	*0.339*	2.17	*1.00*	10/17/17	KCA	1	
Methyl tert-butyl ether(MTBE)	ND	*0.278*	ND	*1.00*	10/17/17	KCA	1	
Methylene Chloride	ND	*0.864*	ND	*3.00*	10/17/17	KCA	1	
n-Butylbenzene	ND	*0.182*	ND	*1.00*	10/17/17	KCA	1	1
o-Xylene	ND	*0.230*	ND	*1.00*	10/17/17	KCA	1	
Propylene	0.720	*0.581*	1.24	*1.00*	10/17/17	KCA	1	1
sec-Butylbenzene	ND	*0.182*	ND	*1.00*	10/17/17	KCA	1	1
Styrene	ND	*0.235*	ND	*1.00*	10/17/17	KCA	1	
Tetrachloroethene	12.4	*0.037*	84.1	*0.25*	10/17/17	KCA	1	
Tetrahydrofuran	ND	*0.339*	ND	*1.00*	10/17/17	KCA	1	1
Toluene	ND	*0.266*	ND	*1.00*	10/17/17	KCA	1	
Trans-1,2-Dichloroethene	4.33	*0.252*	17.2	*1.00*	10/17/17	KCA	1	
trans-1,3-Dichloropropene	ND	*0.221*	ND	*1.00*	10/17/17	KCA	1	
Trichloroethene	8.21	*0.037*	44.1	*0.20*	10/17/17	KCA	1	
Trichlorofluoromethane	0.664	*0.178*	3.73	*1.00*	10/17/17	KCA	1	
Trichlorotrifluoroethane	0.144	*0.131*	1.10	*1.00*	10/17/17	KCA	1	
Vinyl Chloride	ND	*0.078*	ND	*0.20*	10/17/17	KCA	1	
QA/QC Surrogates								
% Bromofluorobenzene	107	*%*	107	*%*	10/17/17	KCA	1	

Ver 1

Project ID: ENSAFE-WESTBURY
Client ID: EFFLUENT

Phoenix I.D.: BZ22466

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.
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Phyllis Shiller, Laboratory Director
October 20, 2017
Reviewed and Released by: Ethan Lee, Project Manager

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

October 20, 2017

QA/QC Data

SDG I.D.: GBZ22465

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 406095 (ppbv), QC Sample No: BZ22465 (BZ22465 (1X, 10X, 125X) , BZ22466 (1X, 10X))												
Volatiles												
1,1,1,2-Tetrachloroethane	ND	0.146	ND	1.00	123	ND	ND	ND	ND	NC	70 - 130	25
1,1,1-Trichloroethane	ND	0.183	ND	1.00	103	5.45	5.56	1.00	1.02	2.0	70 - 130	25
1,1,2,2-Tetrachloroethane	ND	0.146	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25
1,1,2-Trichloroethane	ND	0.183	ND	1.00	119	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethane	ND	0.247	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25
1,1-Dichloroethene	ND	0.252	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trichlorobenzene	ND	0.135	ND	1.00	130	ND	ND	ND	ND	NC	70 - 130	25
1,2,4-Trimethylbenzene	ND	0.204	ND	1.00	116	ND	ND	ND	ND	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	0.166	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichloroethane	ND	0.247	ND	1.00	102	ND	ND	ND	ND	NC	70 - 130	25
1,2-dichloropropane	ND	0.216	ND	1.00	113	ND	ND	ND	ND	NC	70 - 130	25
1,2-Dichlorotetrafluoroethane	ND	0.143	ND	1.00	115	ND	ND	ND	ND	NC	70 - 130	25
1,3,5-Trimethylbenzene	ND	0.204	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25
1,3-Butadiene	ND	0.452	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
1,3-Dichlorobenzene	ND	0.166	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dichlorobenzene	ND	0.166	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
1,4-Dioxane	ND	0.278	ND	1.00	111	ND	ND	ND	ND	NC	70 - 130	25
2-Hexanone(MBK)	ND	0.244	ND	1.00	120	ND	ND	ND	ND	NC	70 - 130	25
4-Ethyltoluene	ND	0.204	ND	1.00	116	ND	ND	ND	ND	NC	70 - 130	25
4-Isopropyltoluene	ND	0.182	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25
4-Methyl-2-pentanone(MIBK)	ND	0.244	ND	1.00	127	ND	ND	ND	ND	NC	70 - 130	25
Acetone	ND	0.421	ND	1.00	101	4.44 S	4.51 S	1.87 S	1.90 S	NC	70 - 130	25
Acrylonitrile	ND	0.461	ND	1.00	112	ND	ND	ND	ND	NC	70 - 130	25
Benzene	ND	0.313	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25
Benzyl chloride	ND	0.193	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25
Bromodichloromethane	ND	0.149	ND	1.00	104	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	0.257	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25
Carbon Disulfide	ND	0.321	ND	1.00	105	ND	ND	ND	ND	NC	70 - 130	25
Carbon Tetrachloride	ND	0.040	ND	0.25	101	0.52	0.52	0.082	0.082	NC	70 - 130	25
Chlorobenzene	ND	0.217	ND	1.00	112	1.80	1.80	0.392	0.391	NC	70 - 130	25
Chloroethane	ND	0.379	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25
Chloroform	ND	0.205	ND	1.00	99	ND	ND	ND	ND	NC	70 - 130	25
Chloromethane	ND	0.484	ND	1.00	109	ND	ND	ND	ND	NC	70 - 130	25
Cis-1,2-Dichloroethene	ND	0.256	ND	1.01	101	769	800	194	202	4.0	70 - 130	25
cis-1,3-Dichloropropene	ND	0.220	ND	1.00	117	ND	ND	ND	ND	NC	70 - 130	25
Cyclohexane	ND	0.291	ND	1.00	106	ND	ND	ND	ND	NC	70 - 130	25
Dibromochloromethane	ND	0.117	ND	1.00	116	ND	ND	ND	ND	NC	70 - 130	25
Dichlorodifluoromethane	ND	0.202	ND	1.00	113	2.91	2.76	0.589	0.558	NC	70 - 130	25
Ethanol	ND	0.531	ND	1.00	92	1.49	1.61	0.793	0.853	NC	70 - 130	25

QA/QC Data

SDG I.D.: GBZ22465

Parameter	Blk ppbv	Blk RL ppbv	Blk ug/m3	Blk RL ug/m3	LCS %	Sample Result ug/m3	Sample Dup ug/m3	Sample Result ppbv	Sample Dup ppbv	DUP RPD	% Rec Limits	% RPD Limits	
Ethyl acetate	ND	0.278	ND	1.00	121	ND	ND	ND	ND	NC	70 - 130	25	
Ethylbenzene	ND	0.230	ND	1.00	124	ND	ND	ND	ND	NC	70 - 130	25	
Heptane	ND	0.244	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25	
Hexachlorobutadiene	ND	0.094	ND	1.00	92	ND	ND	ND	ND	NC	70 - 130	25	
Hexane	ND	0.284	ND	1.00	103	ND	ND	ND	ND	NC	70 - 130	25	
Isopropylalcohol	ND	0.407	ND	1.00	97	1.22	1.28	0.495	0.521	NC	70 - 130	25	
Isopropylbenzene	ND	0.204	ND	1.00	125	ND	ND	ND	ND	NC	70 - 130	25	
m,p-Xylene	ND	0.230	ND	1.00	119	ND	ND	ND	ND	NC	70 - 130	25	
Methyl Ethyl Ketone	ND	0.339	ND	1.00	114	ND	ND	ND	ND	NC	70 - 130	25	
Methyl tert-butyl ether(MTBE)	ND	0.277	ND	1.00	117	ND	ND	ND	ND	NC	70 - 130	25	
Methylene Chloride	ND	0.288	ND	1.00	96	ND	ND	ND	ND	NC	70 - 130	25	
n-Butylbenzene	ND	0.182	ND	1.00	110	ND	ND	ND	ND	NC	70 - 130	25	
o-Xylene	ND	0.230	ND	1.00	121	ND	ND	ND	ND	NC	70 - 130	25	
Propylene	ND	0.581	ND	1.00	113	ND	ND	ND	ND	NC	70 - 130	25	
sec-Butylbenzene	ND	0.182	ND	1.00	107	ND	ND	ND	ND	NC	70 - 130	25	
Styrene	ND	0.235	ND	1.00	121	ND	ND	ND	ND	NC	70 - 130	25	
Tetrachloroethene	ND	0.037	ND	0.25	114	2260	2490	334	368	9.7	70 - 130	25	
Tetrahydrofuran	ND	0.339	ND	1.00	124	ND	ND	ND	ND	NC	70 - 130	25	
Toluene	ND	0.266	ND	1.00	117	ND	ND	ND	ND	NC	70 - 130	25	
Trans-1,2-Dichloroethene	ND	0.252	ND	1.00	99	11.6	12.1	2.93	3.06	4.3	70 - 130	25	
trans-1,3-Dichloropropene	ND	0.220	ND	1.00	117	ND	ND	ND	ND	NC	70 - 130	25	
Trichloroethene	ND	0.047	ND	0.25	104	1250	1360	233	254	8.6	70 - 130	25	
Trichlorofluoromethane	ND	0.178	ND	1.00	100	1.79	1.81	0.319	0.323	NC	70 - 130	25	
Trichlorotrifluoroethane	ND	0.131	ND	1.00	101	ND	ND	ND	ND	NC	70 - 130	25	
Vinyl Chloride	ND	0.098	ND	0.25	105	ND	ND	ND	ND	NC	70 - 130	25	
% Bromofluorobenzene	136	%	136	%	101	110	116	110	116	NC	70 - 130	25	s

s = This parameter is outside laboratory Blank Surrogate 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
October 20, 2017

Friday, October 20, 2017

Criteria: None

State: NY

Sample Criteria Exceedances Report

GBZ22465 - 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

October 20, 2017 SDG I.D.: GBZ22465

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

AIRSIM

CHEM24 10/17/17-1: BZ22465, BZ22466

The following Initial Calibration compounds did not meet RSD% criteria: 1,1,1,2-Tetrachloroethane(sim) 34% (30%), Ethyl acetate 31% (30%)
The following Initial Calibration compounds did not meet maximum RSD% criteria: 1,1,1,2-Tetrachloroethane(sim) 34% (30%), Ethyl acetate 31% (30%)

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. # Page 1 of 1

Data Delivery:
☐ Fax #:
☐ Email:
☐ Phone #:

Report to: Jim Wilkinson
Customer: EnviroTrac Ltd
Address: 5 Old Dock Road
Yaphank NY 11980

Invoice to: EnviroTrac

Sampled by: D. Weber

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															
22465	INFLUENT	745	1.4	-30		NA	NA	1105	1106	10/13/17	—	—			X		X
22466	EFFLUENT	841	↓	↓		↓	↓	1100	1101	↓					X		X
	1.4L Grab																

Relinquished by:	Accepted by:	Date:	Time:
		10/13/17	1130
		10-17-17	1630

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

SPECIAL INSTRUCTIONS, QC REQUIREMENTS, REGULATORY INFORMATION:

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:

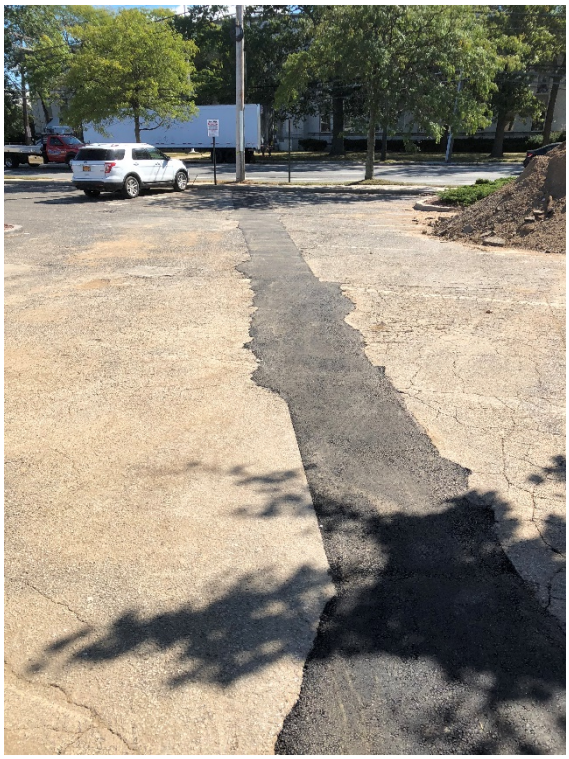
Appendix C

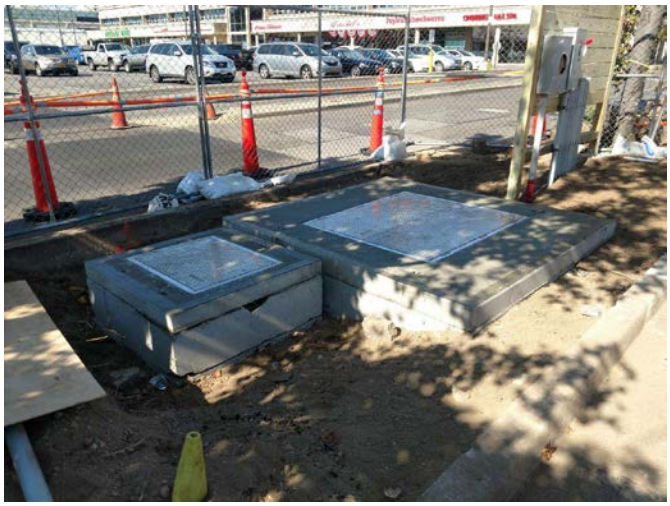
Groundwater Extraction/Hydraulic Containment System Installation

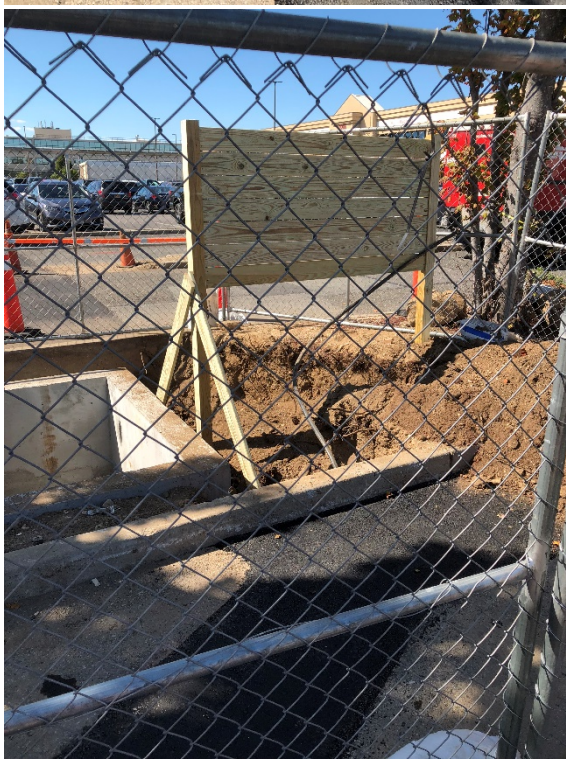
Daily Summary Reports

Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Week of October 2nd, 2017

The site contractor and electrician installed the system vaults and stand for the electrical service and system control panel throughout the week.





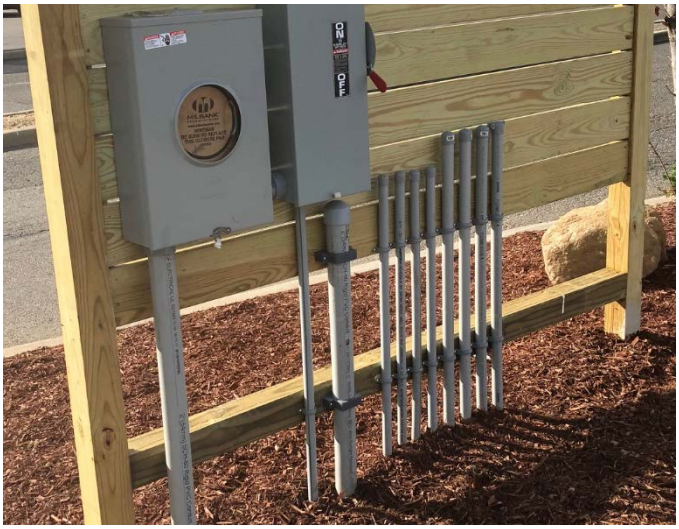


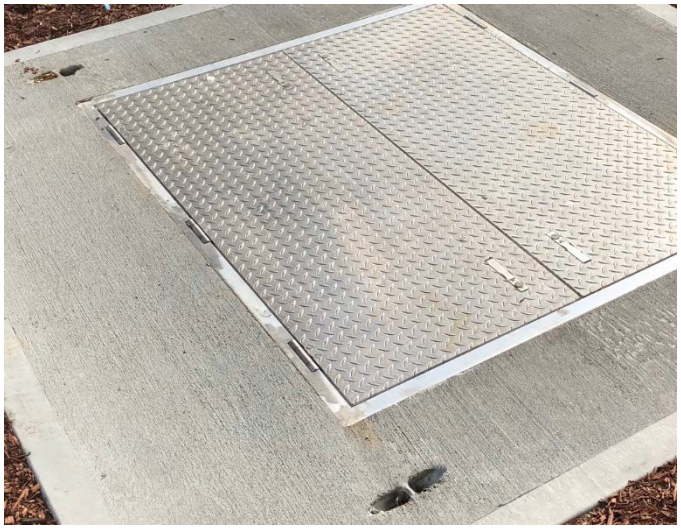
Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Monday, October 16, 2017

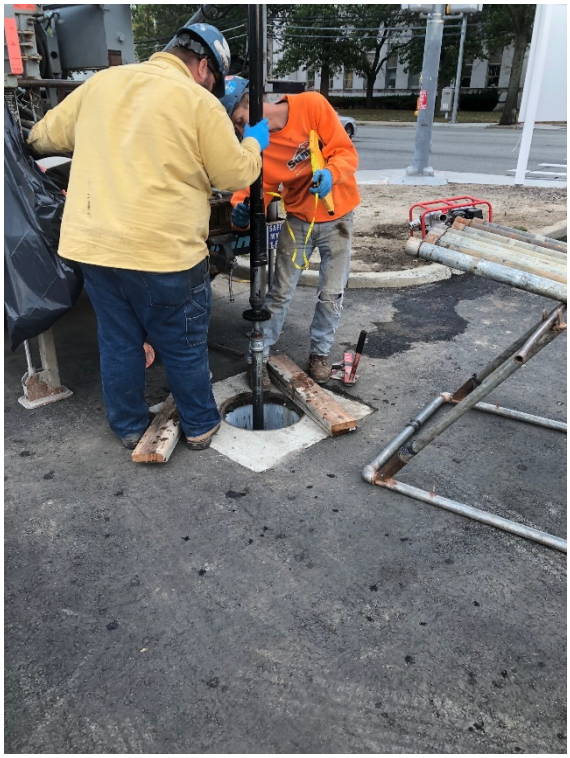
Summit mobilized to the site for further development activities.

- Approximately 16,000 gallons discharged from the frac tank. Will complete the discharge of the remaining 3,000 gallons tomorrow.
- Water jetted a bentonite mud reducer fluid into EX-1C well screen, then surged well screen for 1 hour.

System vaults and control panel mount completed prior to arrival on-site.



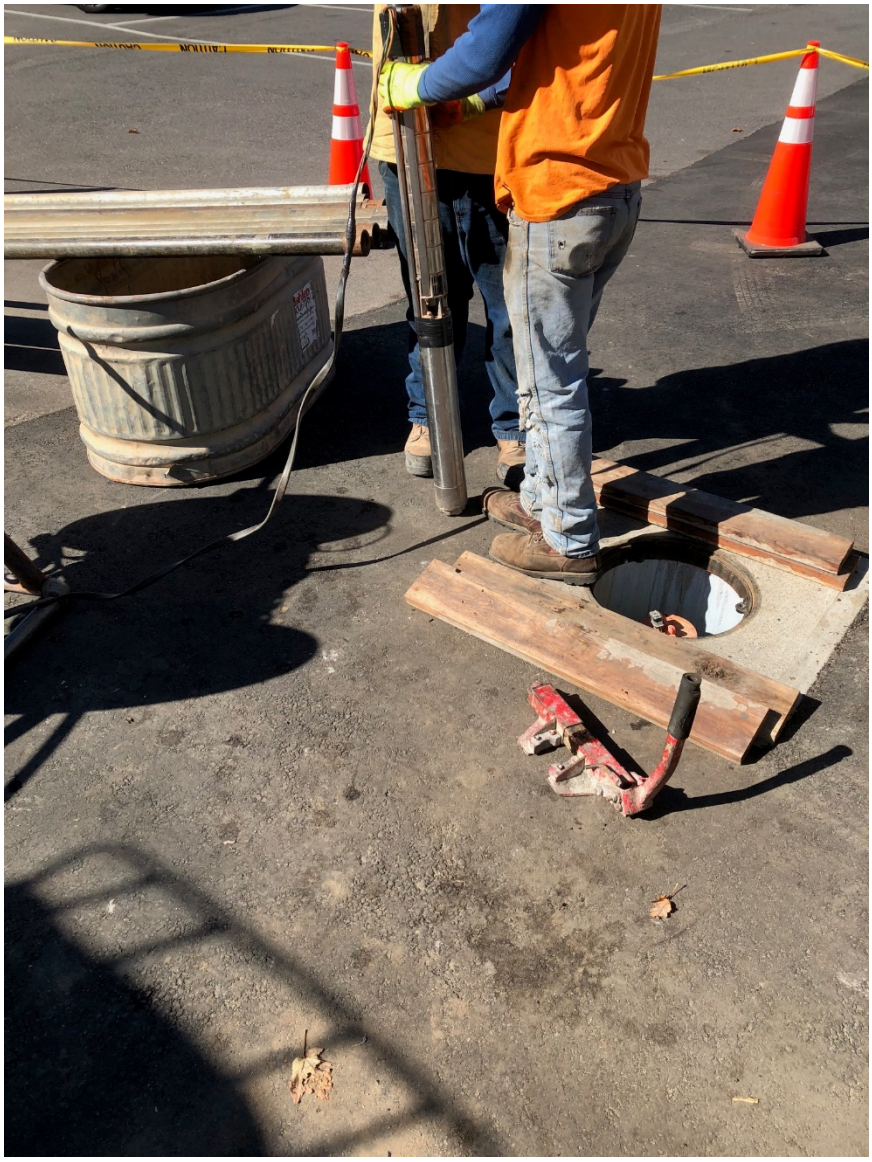




Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Tuesday, October 17, 2017

Development activities continued.

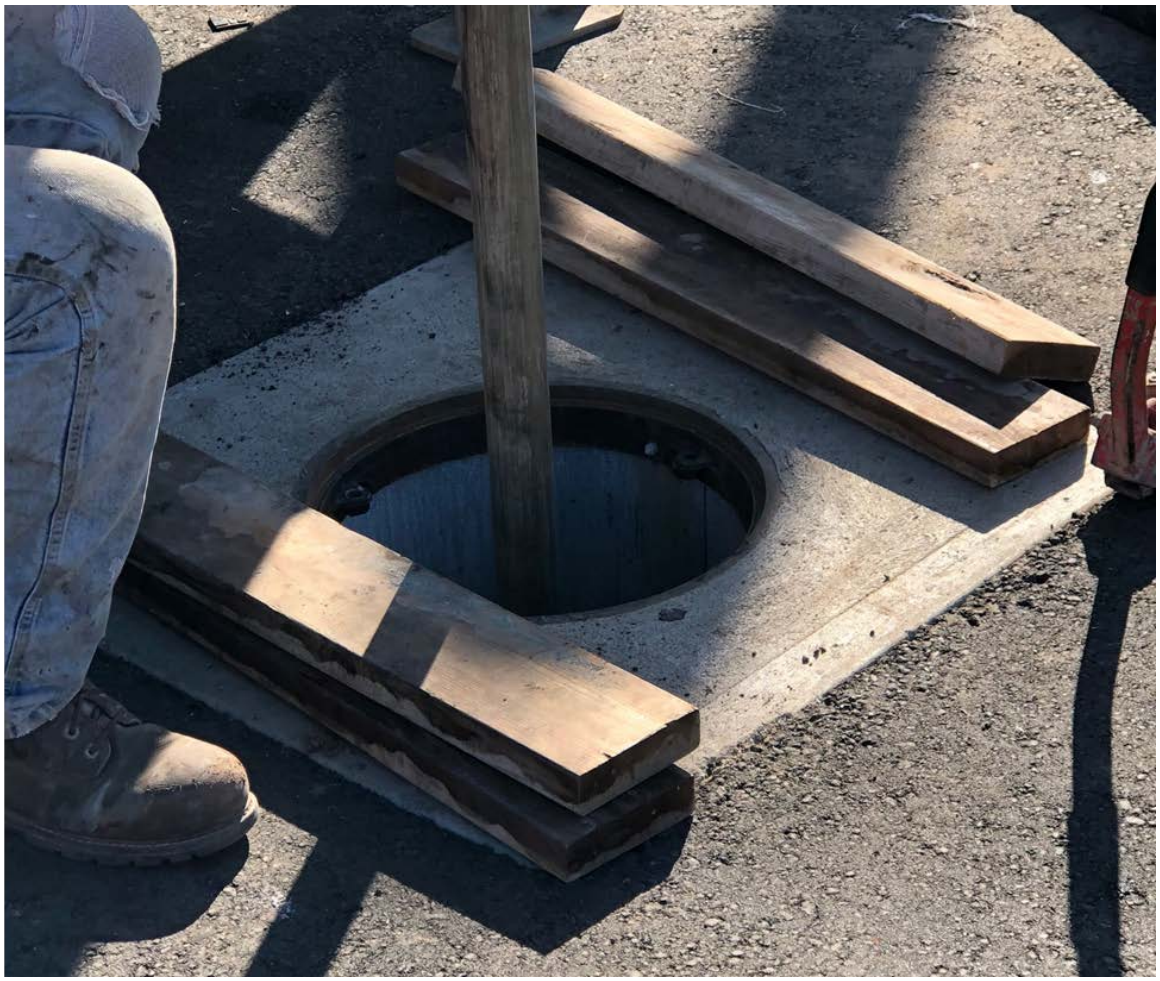
- The remaining 3,000 gallons was discharged from the frac tank.
- EX-1C was surged for 3 more hours. Then ~2,000 gallons was pumped from the well at 50 gpm.



Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Wednesday, October 18, 2017

Development activities continued.

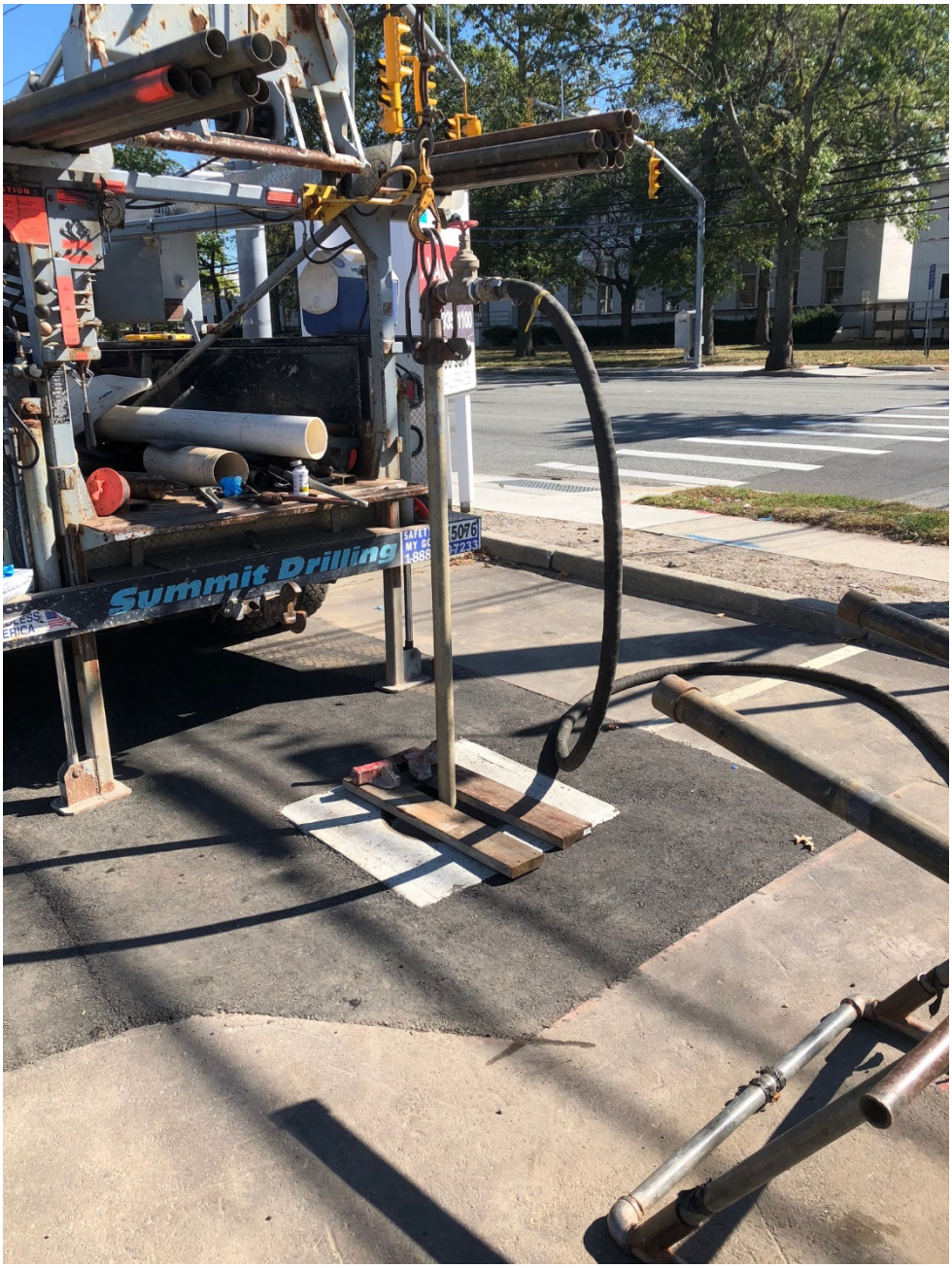
- EX-1C surged for 8 hours.



Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Thursday, October 19, 2017

Development activities continued.

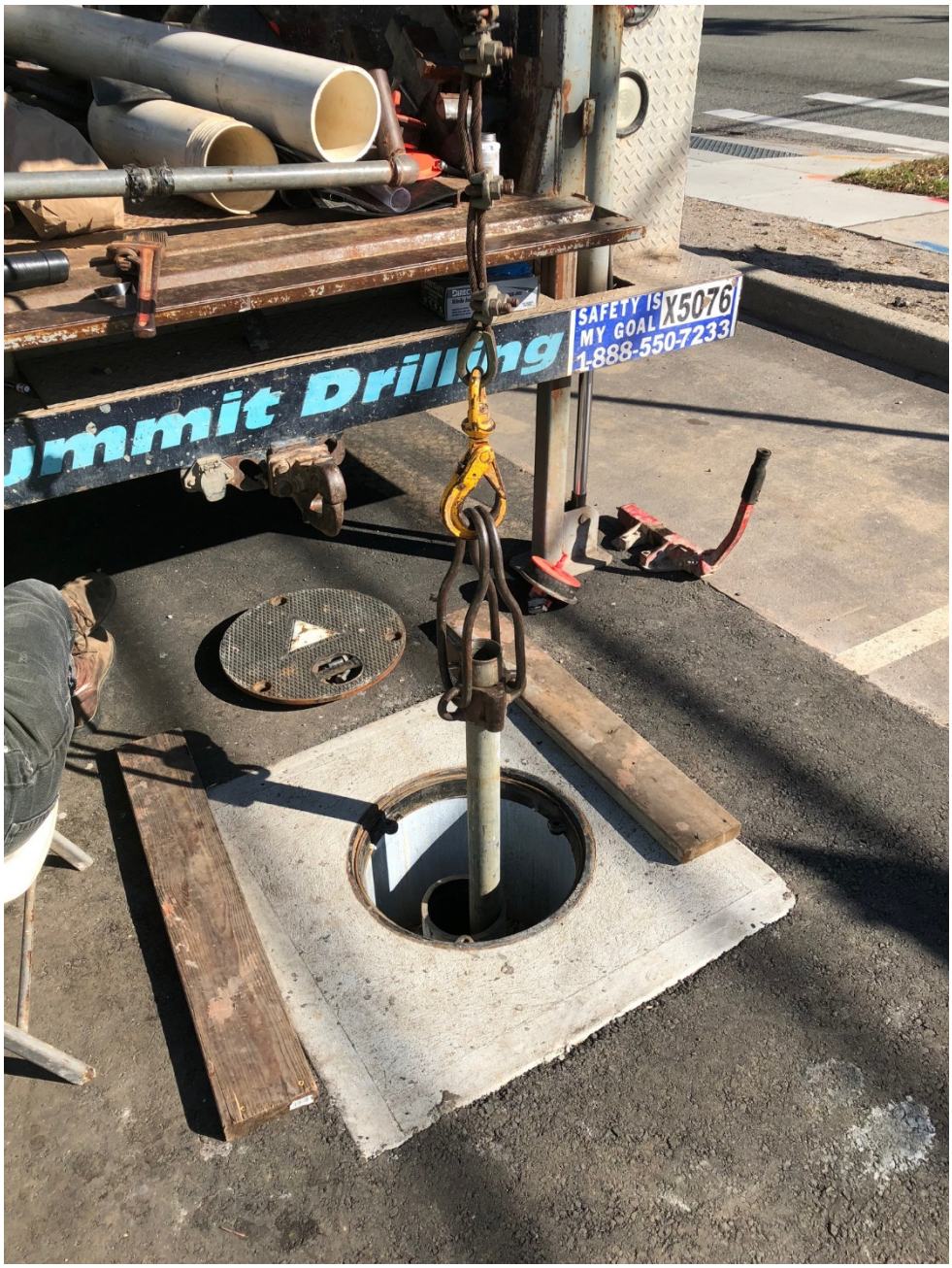
- Development was completed at EX-1C after pumping 1,000 gallons at 50 gpm.
- Development began at EX-1A, mud reducing fluid was added and the well was surged for 3 hours



Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Friday, October 20, 2017

Development activities continued.

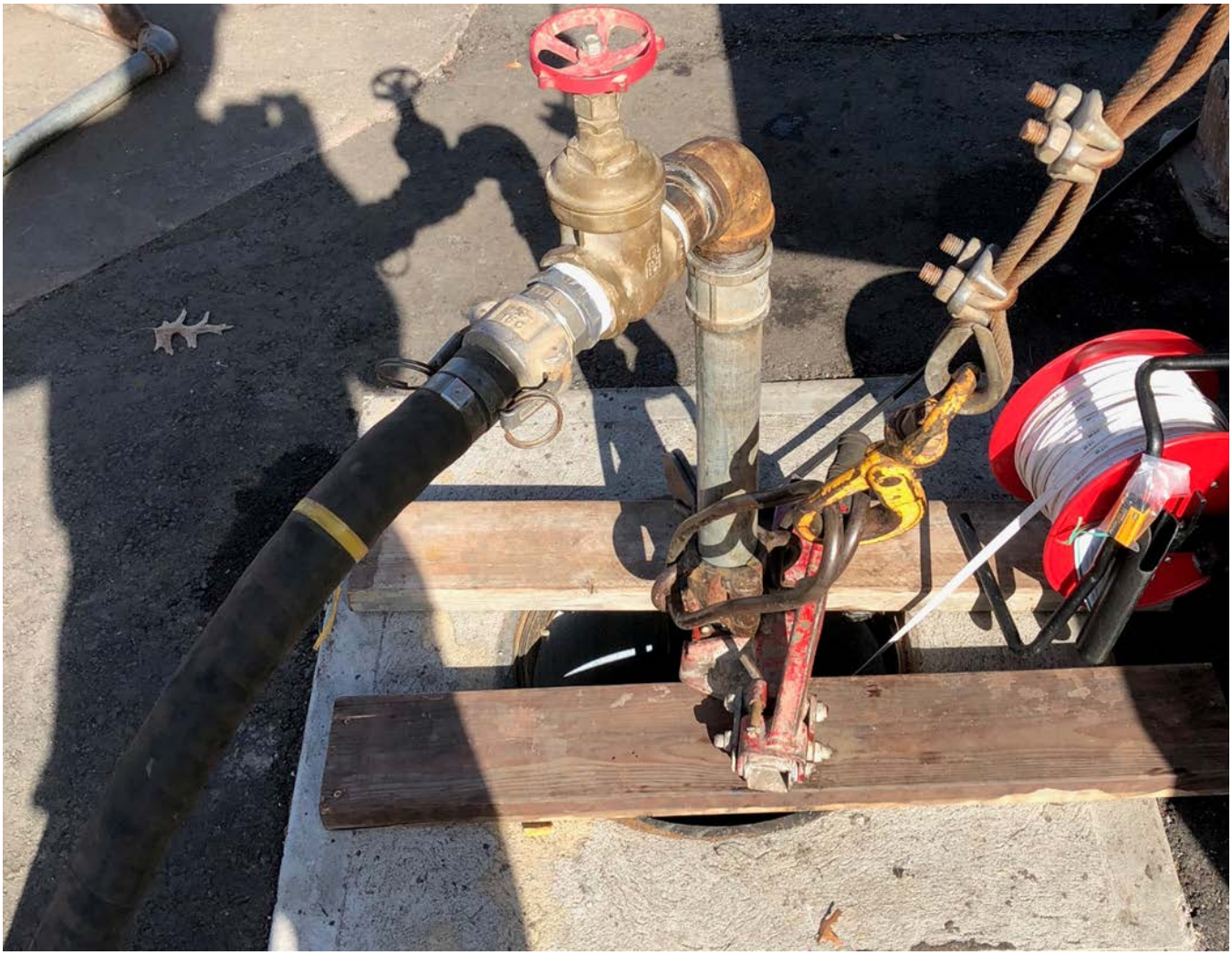
- Development continued at EX-1A, the well was surged for 7 hours.



Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Monday, October 23, 2017

Development activities continued.

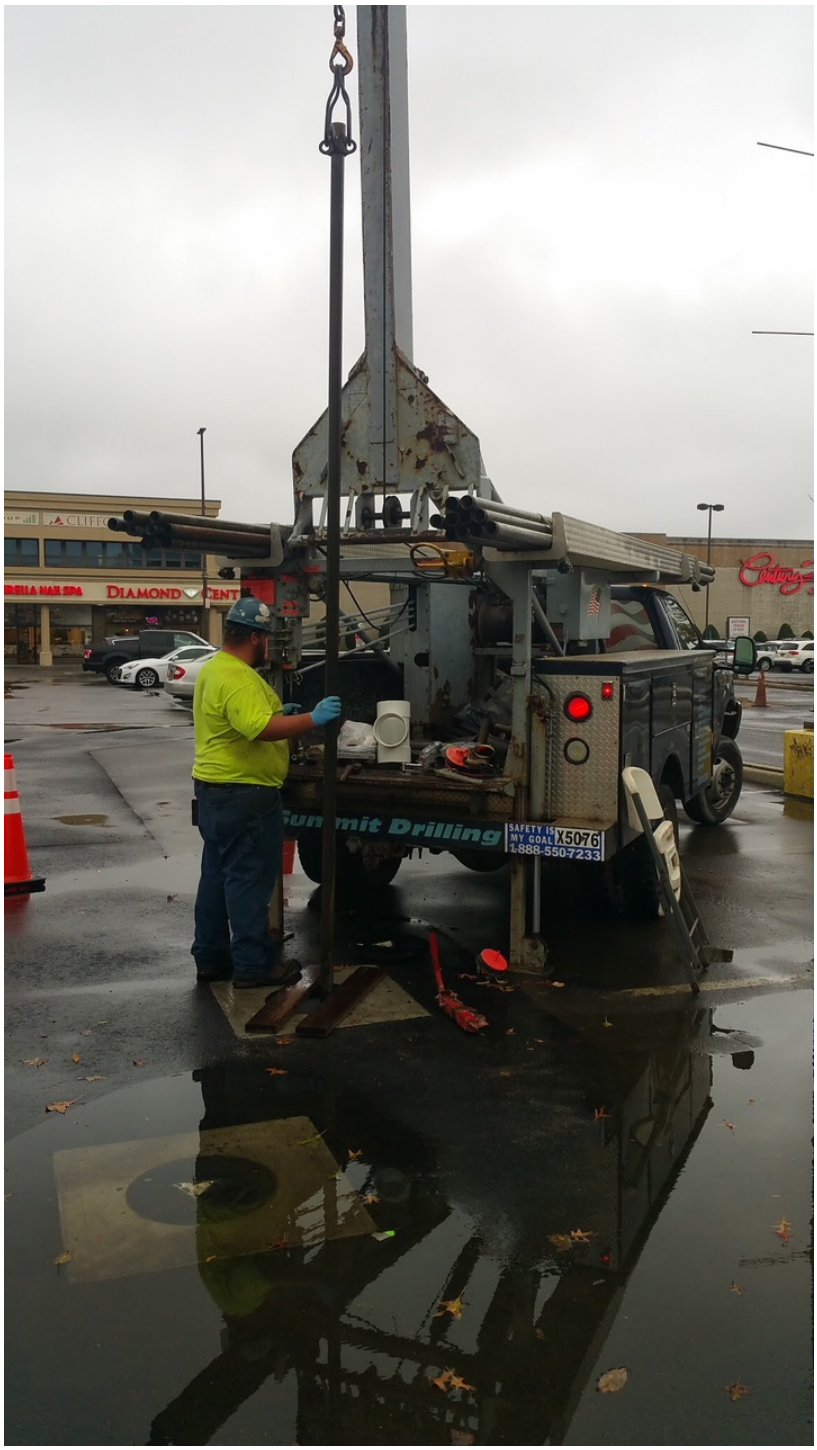
- EX-1A: development was completed after surging for 1 hour, and pumping 1,000 gallons at 20 GPM and 1,000 gallons at 30 GPM (2,000 gallons total).
- EX-1B: development began, mud reducing fluid was added and was surged for 1 hour.



Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Tuesday, October 24, 2017

Development activities continued.

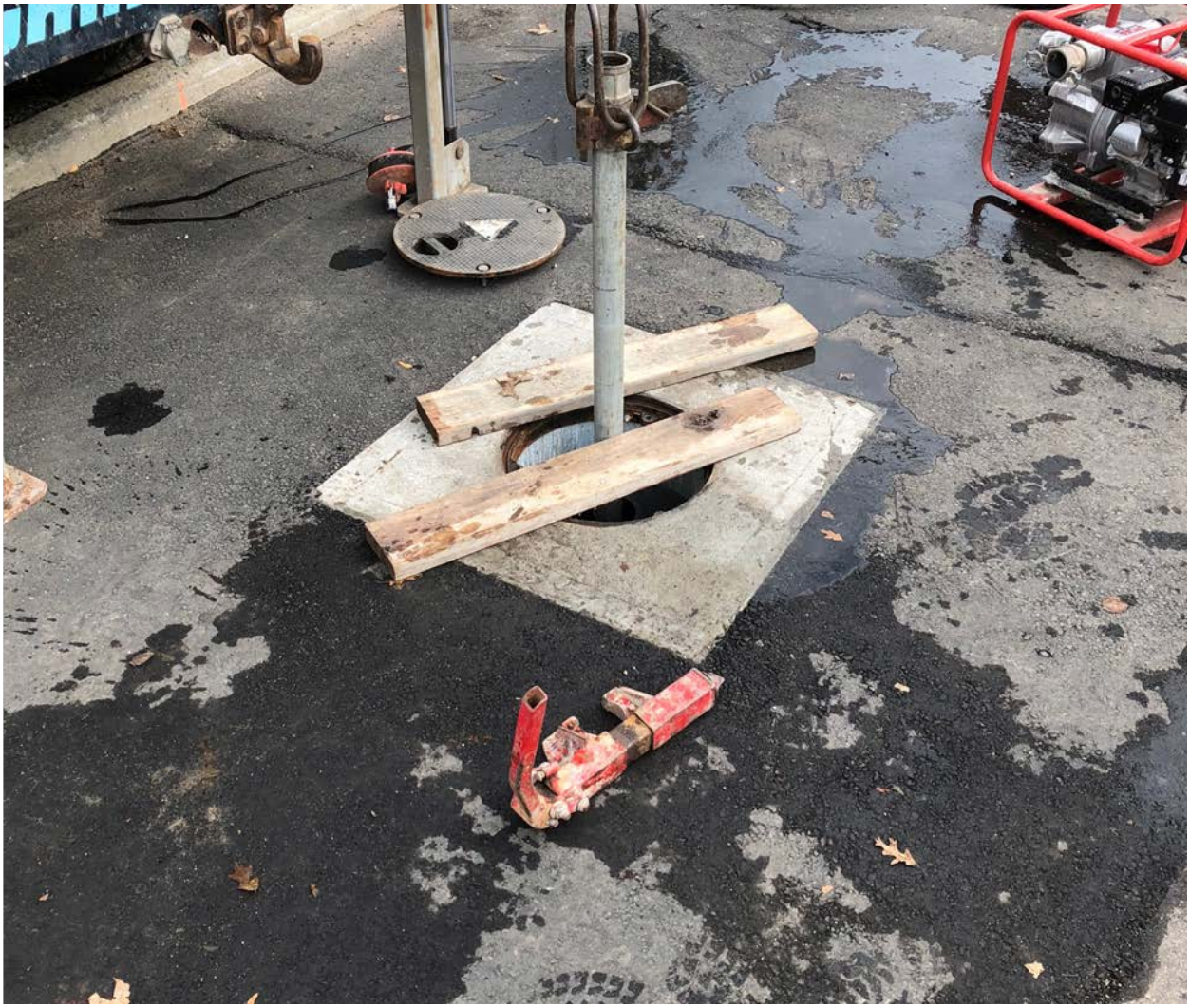
- EX-1B: development began, well was surged for 8 hours.



Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Wednesday, October 25, 2017

Development activities continued.

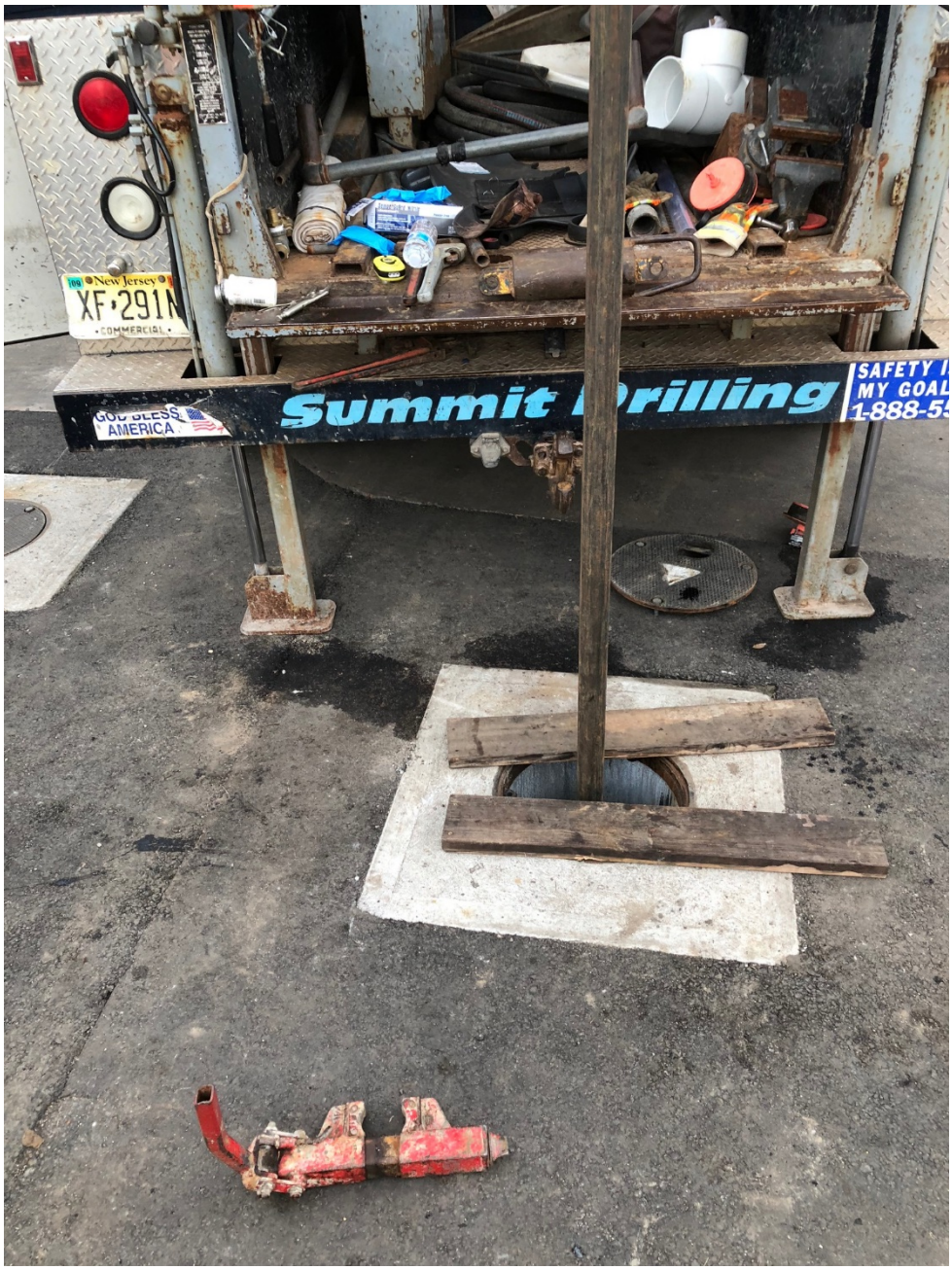
- EX-1B: development was completed after pumping 2,000 gallons at 30 GPM.
- EX-1D: development began, mud reducing fluid was added and the well was surged for 2.5 hours.



Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Thursday, October 26, 2017

Development activities continued.

- EX-1D: well was surged for 9 hours.



Frost Street Sites
Groundwater Extraction Hydraulic Containment
Daily Summary
Friday, October 27, 2017

Development activities were completed.

- EX-1D: well was surged for 1 hours. 2,000 gallons were removed at 50 gpm.

Drillers demobilized from the site.