D&B ENGINEERS AND ARCHITECTS, P.C.

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June 11, 2019

Ms. Caroline Eigenbrodt
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, NY 12233-7013

Re: New York State Superfund Standby Contract
Site Management Report No. 2
Work Assignment No. D007620-41
123 Post Avenue Site – OU1 (Site No. 130088)
D&B No. 3150-41

Dear Ms. Eigenbrodt:

The purpose of this letter is to summarize site management activities completed for the 123 Post Avenue Site – OU1, located at 123 Post Avenue, Westbury, NY (see **Attachment A**). This monitoring report addresses the period from October 1, 2018 through December 31, 2018. Presented below is a summary of system operations during the quarter, as well as the results of analytical testing completed in accordance with the approved work plan for the referenced work assignment.

During this reporting period, activities occurring at the Site included weekly soil vapor extraction (SVE) system operation and maintenance and routine groundwater sampling.

SVE System Operation, Maintenance and Sampling

System Performance Summary

D&B completed weekly site visits to complete routine operation and maintenance activities. System monitoring logs are provided in **Attachment B**. The SVE system has been in operation since start-up on September 17, 2018 of the previous reporting period through October 11, 2018 of this reporting period. The system was shut down on October 11, 2018 to allow for a soil vapor intrusion (SVI) study to be completed during the upcoming heating season. The performance of the SVE system during the current reporting period and since start-up on September 17, 2018, is summarized below.

SVE System Performance Summary			
Parameter	Current Reporting Period	Previous Reporting Period	Totals to Date [3]
SVE System Average Flow Rate (cfm)[1]	158.35	203.85	181.25
VOC Removal Summary (lbs.)[2]	4.23	6.91	11.14

1. SVE System flow rates are monitored on a weekly basis.
2. SVE discharge vapor sampling is conducted on a quarterly basis; however, a vapor phase effluent sample was not collected this reporting period as the SVE system was shut down on October 11, 2018 to allow for the SVI study. VOC removal is calculated based on the discharge vapor sample collected during the previous reporting period.
3. Totals are based on SVE System start-up on September 17, 2018 through the end of this reporting period.

Soil Vapor Extraction System Runtime/Downtime Summary

The total elapsed time for this reporting period from October 1, 2018 through December 31, 2018 was 2,208 hours. Of this amount, the SVE system operated for 252 hours or 11% percent of the total elapsed time. A detailed system downtime summary, which identifies specific information regarding alarm conditions, downtime, system restart time, repairs, etc. is provided as **Attachment C**.

System runtime/downtime summary for the SVE system is summarized below.

SVE Runtime/Downtime Summary		
	(Hours)	(Percentage)
SVE System Runtime	252	11%
SVE System Downtime	1,956	89%
Total SVE System Runtime to Date [1]	572	23%

1. Total SVE System runtime and downtime to date are based the system being restarted on September 17, 2018.

Soil Vapor Extraction System Vapor Sampling

As the SVE system was shut down on October 11, 2018 a vapor phase effluent discharge sample was not collected this reporting period; however, a sample was collected on September 17, 2018 of the previous reporting period which was utilized to calculate the emissions rate for this reporting period. The total volatile organic compound (VOC) emissions rate for this reporting period was 1.68E-02 pounds per hour (lbs./hr.) where the SVE blower average flow rate was 158.35 CFM. Since the system start-up through the end of this reporting period the SVE system removed approximately 11.14 pounds of VOCs of which 4.23 pounds were removed this reporting period. The emissions rate is below the site-specific effluent limit of 0.5 lbs/hr, which was developed in consultation with the NYSDEC as a means of monitoring VOC emissions associated with the SVE System. Refer to **Attachment D** for analytical results.

Groundwater Monitoring and Sampling

Water levels were measured at the monitoring wells in conjunction with the quarterly groundwater sampling event conducted on December 18, 2018. Depth to water measurements and topographic survey data were used to calculate groundwater elevations and to prepare a groundwater elevation contour map. Groundwater level measurements and a groundwater contour map are provided in **Attachment A**. Based on information gathered, the depth to groundwater ranges from 30.72 feet bgs in MW-01A to 33.28 feet bgs in MW-02A. Based on groundwater elevation measurements, the groundwater flow direction is to the southwest.

Groundwater samples were collected from three on-site monitoring wells (MW-1A, MW-2A and MW-3) during this reporting period. Samples were analyzed for VOCs utilizing USEPA Method 8260, all results are compared to NYSDEC Class GA Groundwater Standards, Criteria and Guidance Values (SCGs). The locations of on-site groundwater monitoring wells are provided in **Attachment A**. VOCs were not detected in excess of SCG values in monitoring wells MW-1A and MW-2A; however, PCE was detected in excess of the SCG value of 5 ug/l in monitoring well MW-3 at a concentration of 5.8 ug/l. **Attachment D** presents tabulated analytical results relative to SCGs and **Attachment E** presents groundwater quality logs.

Data Validation Summary

Three groundwater samples were collected this reporting period. All three groundwater samples collected throughout this reporting period were analyzed for VOCs via USEPA Method 8260.

The laboratory deliverable package was reviewed to determine the usability of the sample results. Data validation checklists are provided as **Attachment F**. The findings of the review process are summarized below:

Groundwater Samples:

- Methylene chloride was detected in the trip blank provided by Test America. Methylene chloride was not detected in the groundwater samples collected on December 18, 2018; therefore, qualification of the data was not necessary.

- The percent recoveries (%Rs) were above the quality control (QC) limits in the matrix spike (MS) for chloromethane and cis-1,2-dichloroethene. Cis-1,2-dichloroethene was qualified as estimated (J) in samples MW-2A and MW-3.

- Chlorotrifluoroethene and vinyl chloride percent differences (%D) were above the QC limit in the continuing calibration. These compounds were not detected in the groundwater samples collected and qualification of the data was not necessary.

Conclusions

- The site management activities completed this reporting period included weekly SVE system operation and maintenance and routine groundwater sampling.

- The SVE system was operating during this reporting period since system start-up on September 17, 2018; however, the system was shutdown on October 11, 2018, to allow for a SVI study to be completed during the upcoming heating season.

- One vapor-phase discharge sample was collected from the SVE effluent following SVE system start-up on September 17, 2018. The total VOC emissions rate for this reporting period was based on the discharge vapor sample collected during the previous reporting period. As such the emissions rate for this reporting period was 1.68E-02 pounds per hour (lbs./hr.) lower than the Site-Specific Vapor-Phase Effluent Limit of 0.5lbs/hr established by the NYSDEC.

- Three on-site monitoring wells (MW-1A, MW-2A, MW-3) were sampled on December 18, 2018. VOCs were not detected in excess of the SCG value in monitoring wells MW-1A and MW-2A; however, PCE was detected in excess of its SCG value of 5 ug/l in monitoring well MW-3 at a concentration of 5.8 ug/l.

Recommendations

- The SVE system should remain shutdown to allow for a SVI study to be completed during the upcoming heating season.

- An evaluation should be performed after completion of the SVI study to determine if continued operation of the SVE system is necessary or if an alternate remedial measure such as installation of sub-slab depressurization system(s) should be implemented.

- Groundwater monitoring and sampling should continue to be conducted on a quarterly basis to monitor seasonal trends in groundwater contaminant levels at the site.

- Continue to report results, conclusions and recommendations for site/system performance activities in quarterly Site Management Reports and annual Periodic Review Reports.

Please do not hesitate to contact me at (516) 364-9890, Ext. 3506 if you have any questions.

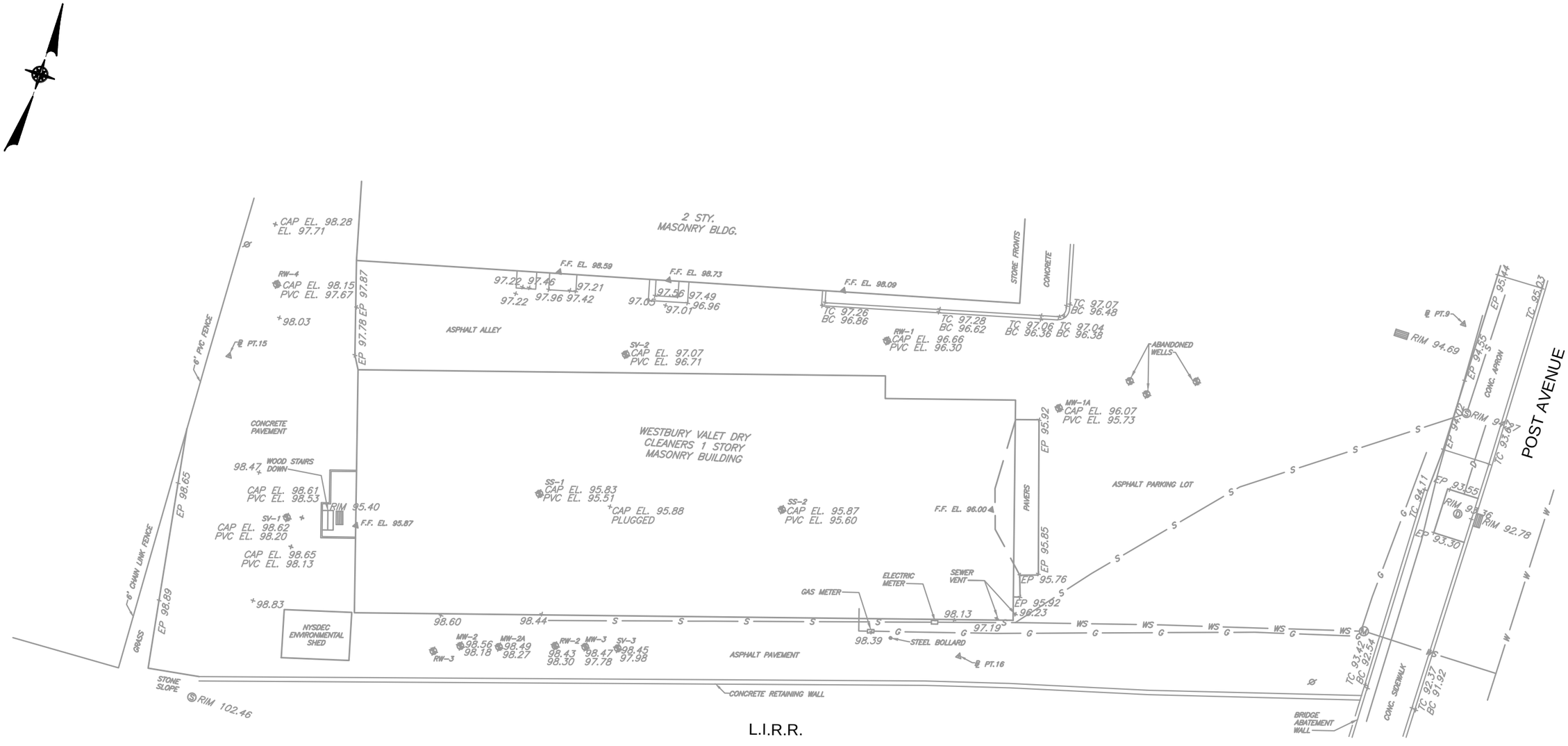
Very truly yours,

James Van Horn
Project Manager

JVH\TJ\nc,cf
Attachments
cc: M. Wright (D&B)
♦3150\JVH040219CE_SOW-ltr(R02)

ATTACHMENT A

FIGURES AND TABLES



L.I.R.R.

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NYSDEC SITE - 123 POST AVENUE - OU1

WESTBURY, NY

SITE MAP

SCALE: 1"=16'

FIGURE 1

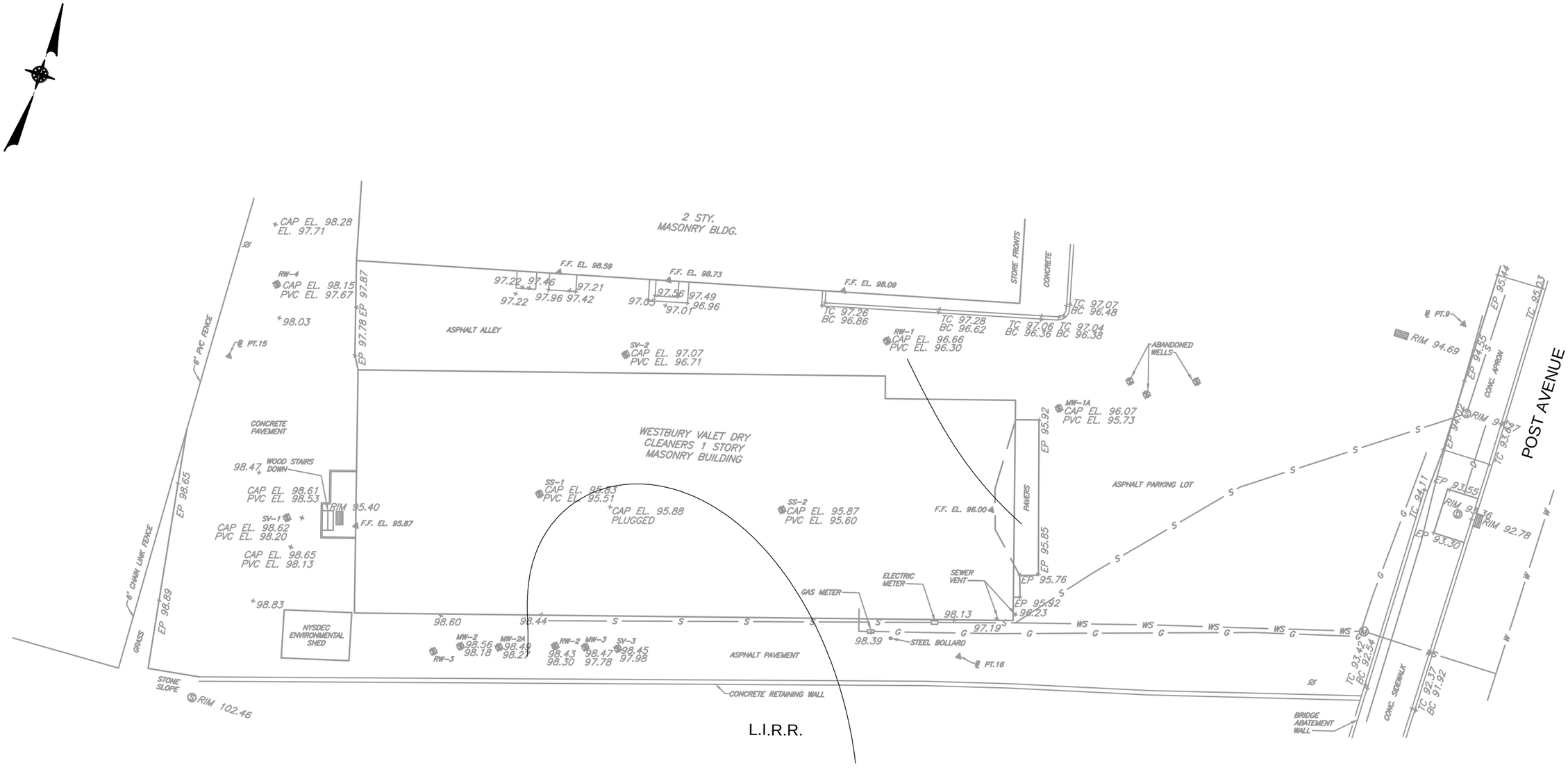
123 POST AVENUE CLEANERS SITE - OU1
GROUNDWATER ELEVATION DATA

Table A-1: Groundwater Elevation Measurements

WELL	LOCATION		GROUND ELEVATION (U.S. Survey Ft.)	TOP OF PVC RISER (U.S. Survey Ft.)	DATE 12/18/2018	
	NORTH	EAST			DTW	ELEV
MW-01A	192449.03	2113998.69	96.07	95.73	30.72	65.01
MW-02A	192388.2	2113928.94	98.49	98.27	33.28	64.99
MW-03	192392.28	2113941.42	98.3	97.78	32.82	64.96

NOTES

-- Not measured
U.S.: United States
Ft.: Feet
DTW: Depth to water
ELEV: Elevation
Vertical Datum: North American Vertical Datum 88
Horizontal Datum: North American Datum 83



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NYSDEC SITE - 123 POST AVENUE-OU1

WESTBURY, NY

GROUND WATER CONTOUR MAP (December 2018)

SCALE: 1"=16'

FIGURE 2

F:\3150-41C\DWG\3150-41C C-SP01_GND_CONT-05-30-19.dwg, 5/30/2019 7:50:41 AM, kalesius

ATTACHMENT B

SVE SYSTEM FIELD LOGS

123 Post Ave, Westbury, NY
123 Post Ave Cleaners
SVE Field Logs

	Flow (cfm)				Vacuum (inches of water)				PID (ppm)				Pre-Blower Vacuum	Pre-Blower	Post-Blower Pressure	Post-Blower	Post-Blower	Moist-Sep Vacuum	Post Blower Temp
Date/Time	RW-1S	RW-2S	RW-3S	RW-4S	RW-1S	RW-2S	RW-3S	RW-4S	RW-1S	RW-2S	RW-3S	RW-4S	(inches of water)	Flow (cfm)	(inches of water)	Flow (cfm)	PID (ppm)	(inches of water)	°F
9/17/18 5:00 PM	39	65	--	52	-4	-5	-7	-8	2	5.1	19.2	9.2	--	190	--	210	11.2	-30	117.2
9/26/18 4:30 PM	39	65	65	50	-5	-5.5	-6.5	-9	1.6	1.4	4.9	4.8	--	190	--	197.7	3.7	-32	122.5
10/5/18 2:10 PM	29.1	45.1	66.8	60.5	-4.32	-4.96	-6.68	-8.48	--	--	--	--	-32	170	0	223.3	--	-32	119
10/11/18 10:40 AM	20.2	35.6	78.1	74.8	-4.14	-5.61	-7.7	-9.65	0.0	0.4	1.8	1.6	-32	175	0	93.4	1.7	-32	118
Average for Reporting Period	24.65	40.35	72.45	67.65	-4.23	-5.29	-7.19	-9.07	0.00	0.40	1.80	1.60	--	172.50	--	158.35	1.70	-32.00	118.50
Average Since Start-up	31.83	52.68	69.97	59.33	-4.37	-5.27	-6.97	-8.78	1.20	2.30	8.63	5.20	--	181.25	--	181.10	5.53	-31.50	119.18

ATTACHMENT C

SVE DOWNTIME TABLE

Table1
New York State Department of Environmental Conservation
NYSDEC Site No. 130088 - 123 Post Avenue Site
Westbury, New York
System Downtime Summary

Shut-Off Date/Time	Restart Date/Time	Component Restarted	Cause	Action Taken
--	9/17/18 15:45	SVE	System Start-up	Maintenance and Restart of on-site SVE system.
10/11/18 11:33	--	SVE	System shut down for SVI Study	--

ATTACHMENT D

TABULATED ANALYTICAL RESULTS

Table 3
123 Post Avenue Site
Air Effluent Sample
Volatile Organic Compounds (VOCs)

Sample ID	EFFLUENT
Sampling Date	09/17/18
Units	ug/m^3
1,1,1-Trichloroethane	180
1,1,2,2-Tetrachloroethane	U
1,1,2-Trichloro-1,2,2-Trifluoroethane	U
1,1,2-Trichloroethane	U
1,1-Dichloroethane	130
1,1-Dichloroethene	U
1,2,4-Trichlorobenzene	U
1,2,4-Trimethylbenzene	U
1,2-Dibromoethane (Ethylene Dibromide)	U
1,2-Dichlorobenzene	U
1,2-Dichloroethane	U
1,2-Dichloropropane	U
1,2-Dichlorotetrafluoroethane	U
1,3,5-Trimethylbenzene (Mesitylene)	U
1,3-Butadiene	U
1,3-Dichlorobenzene	U
1,4-Dichlorobenzene	U
1,4-Dioxane (P-Dioxane)	U
2,2,4-Trimethylpentane	U
2-Chlorotoluene	U
2-Hexanone	U
4-Ethyltoluene	U
Acetone	U
Allyl Chloride (3-Chloropropene)	U
Benzene	U
Benzyl Chloride	U
Bromodichloromethane	U
Bromoethene	U
Bromoform	U
Bromomethane	U
Butane	U
Carbon Disulfide	U
Carbon Tetrachloride	U
Chlorobenzene	U
Chlorodifluoromethane	U
Chloroethane	U
Chloroform	28 J
Chloromethane	U
Cis-1,2-Dichloroethylene	550
Cis-1,3-Dichloropropene	U
Cyclohexane	U
Cymene	U
Dibromochloromethane	U
Dichlorodifluoromethane	U
Dichloroethylenes	580
Ethylbenzene	U
Hexachlorobutadiene	U
Isopropanol	U
Isopropylbenzene (Cumene)	U
M,P-Xylenes	U
Methyl Ethyl Ketone (2-Butanone)	U

See next page for footnotes.

Table 3
123 Post Avenue Site
Air Effluent Sample
Volatile Organic Compounds (VOCs)

Sample ID	EFFLUENT	
Sampling Date	09/17/18	
Units	ug/m^3	
VOCs continued		
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	U	
Methyl Methacrylate	U	
Methylene Chloride	U	
Naphthalene	U	
N-Butylbenzene	U	
N-Heptane	U	
N-Hexane	U	
N-Propylbenzene	U	
O-Xylene (1,2-Dimethylbenzene)	U	
Sec-Butylbenzene	U	
Styrene	U	
T-Butylbenzene	U	
Tert-Butyl Alcohol	U	
Tert-Butyl Methyl Ether	U	
Tetrachloroethylene(PCE)	**23000**	D
Tetrahydrofuran	U	
Toluene	U	
Trans-1,2-Dichloroethene	29	
Trans-1,3-Dichloropropene	U	
Trichloroethylene (TCE)	**3800**	
Trichlorofluoromethane	U	
Vinyl Chloride	U	
Xylenes, Total	U	
Total Volatile Organic Compounds	28297.00	ug/m3
AVERAGE AIR DISCHARGE FLOW RATE (CFM)	158.35	CFM
TOTAL VOC DISCHARGE RATE (lbs/hr)	1.68E-02	lbs/hr

Qualifiers:
D: Result reported from a secondary dilution
U: Analyzed but not detected
J: Estimated value
Notes:
ug/m^3: Micrograms per cubic meter
lb/hr: pounds per hour
CFM: cublic feet per minute

Table 1
123 Post Avenue Site - OU1
Groundwater Samples
Volatile Organic Compounds

Sample ID	MW-1A	MW-2A	MW-3	NYSDEC Class GA Standard or Guidance Value
Sampling Date	12/18/2018	12/18/2018	12/18/2018	
Units	ug/l	ug/l	ug/l	ug/l
VOLATILE ORGANIC COMPOUNDS				
1,1,1-Trichloroethane	U	U	U	5
1,1,2,2-Tetrachloroethane	U	U	U	5
1,1,2-Trichloro-1,2,2-trifluoroethane	U	U	U	5
1,1,2-Trichloroethane	U	U	U	1
1,1-Dichloroethane	U	U	0.26 J	5
1,1-Dichloroethene	U	U	U	5
1,2,4-Trichlorobenzene	U	U	U	5
1,2-Dibromo-3-Chloropropane	U	U	U	0.04
1,2-Dibromoethane	U	U	U	0.0006
1,2-Dichlorobenzene	U	U	U	3
1,2-Dichloroethane	U	U	U	0.6
1,2-Dichloropropane	U	U	U	1
1,3-Dichlorobenzene	U	U	U	3
1,4-Dichlorobenzene	U	U	U	3
2-Hexanone	U	U	U	50
Acetone	U	U	U	50
Benzene	U	U	U	1
Bromodichloromethane	U	1.1	2.1	50
Bromoform	U	U	0.86 J	50
Bromomethane	U	U	U	5
Carbon Disulfide	U	U	U	60
Carbon Tetrachloride	U	U	U	5
Chlorobenzene	U	U	U	5
Chloroethane	U	U	U	5
Chloroform	U	0.75 J	1.3	7
Chloromethane	U	U	U	5
Cis-1,2-Dichloroethylene	U	1.7 J	0.94 J	5
Cis-1,3-Dichloropropene	U	U	U	0.4
Cyclohexane	U	U	U	--
Dibromochloromethane	U	1.2	2.6	50
Dichlorodifluoromethane	U	U	U	5
Ethylbenzene	U	U	U	5
Isopropylbenzene	U	U	U	5
Methyl acetate	U	U	U	--
Methyl Ethyl Ketone	U	U	U	50
Methyl Isobutyl Ketone	U	U	U	--
Methylcyclohexane	U	U	U	5
Methylene Chloride	U	U	U	5
Styrene	U	U	U	5
Tert-Butyl Methyl Ether	U	U	U	10
Tetrachloroethylene	1.3	4	***5.8***	5
Toluene	U	U	U	5
Trans-1,2-Dichloroethene	U	U	U	5
Trans-1,3-Dichloropropene	U	U	U	0.4
Trichloroethylene	U	0.59 J	U	5
Trichlorofluoromethane	U	U	U	5
Vinyl Chloride	U	U	U	2
Xylenes, Total	U	U	U	5
Total Volatile Compounds	1.3	9.34	13.86	--

Footnotes/Qualifiers:
U: Analyzed for but not detected
ug/l: Micrograms per liter
J: Estimated value or limit
Exceeds Class GA Standard or Guidance Value

D&B ENGINEERS AND ARCHITECTS, P.C.

ATTACHMENT E

GROUNDWATER QUALITY LOGS

FIELD OBSERVATION LOG
MONITORING WELL SAMPLE RECORD

SITE 123 Post Avenue – OU1 DATE: 12/18/2018

WELL ID: MW-1A
PERSONNEL: Tara Judge

Depth of well (from top of casing) 40.10
Initial static water level (from top of casing) 30.72

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Bladder Pump	X	Peristaltic Pump (Low Flow)	

Well Volume Calculation:
2 in. casing: 9.38 ft. of water x 0.16 = 1.5 gallons
3 in. casing: ft. of water x 0.36 = gallons
4 in. casing: ft. of water x 0.65 = gallons

volume of water removed:
2.4 gal. >3 volumes: yes no X purged dry? yes no X

Field Tests

Volume (mL)	Temp (C°)	pH	Conductivity (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	14.33	7.01	1.22	+1,000	3.57	202
500	15.68	6.89	1.39	800	3.37	210
1,000	16.31	6.82	1.47	550	3.62	212
1,500	16.59	6.81	1.43	750	4.05	211
2,000	16.70	6.82	1.40	401	4.31	211
2,500	16.72	6.80	1.39	299	4.57	212
3,000	16.71	6.79	1.38	201	4.75	211
3,500	16.75	6.80	1.35	159	4.79	211
4,000	16.78	6.81	1.34	101	4.99	212
4,500	16.79	6.81	1.33	104	5.10	211
5,000	16.80	6.87	1.32	89.9	5.12	210
6,000	16.79	6.86	1.32	62.7	5.15	210
7,000	16.76	6.86	1.31	47.5	5.19	210
8,000	16.73	6.82	1.31	43.0	5.15	210
9,000	16.73	6.83	1.30	41.2	5.16	209

Sample ID: MW-1A
Sample Time: 12:40 pm
Pump: Bladder pump with drop screen
Meters: Horiba U52 and water level

Analyzed:
(3) 40 mL for VOAs

Observations
Weather/Temperature: Partly Cloudy, 25-35 F, 20 mph winds
Description: Clear, no odor, no sheen
Free Product? yes no X describe
Sheen? yes no X describe
Odor? yes no X describe
Decontaminated the pump, drop screen and changed bladder.

FIELD OBSERVATION LOG
MONITORING WELL SAMPLE RECORD

SITE 123 Post Avenue – OU1 DATE: 12/18/2018

WELL ID: MW-2A
PERSONNEL: Tara Judge

Depth of well (from top of casing) 41.31
Initial static water level (from top of casing) 33.28

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Peristaltic Pump (Low Flow)	

Well Volume Calculation:
2 in. casing: 8.03 ft. of water x 0.16 = 1.3 gallons
3 in. casing: ft. of water x 0.36 = gallons
4 in. casing: ft. of water x 0.65 = gallons

volume of water removed:
2.9 gal. >3 volumes: yes X no purged dry? yes no X

Field Tests

Volume (mL)	Temp (C°)	pH	Conductivity (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	13.80	7.49	0.292	743	5.56	198
1,000	15.23	7.06	0.324	667	4.98	207
2,000	15.67	7.09	0.338	550	4.85	210
3,000	15.93	6.97	0.355	274	4.67	211
4,000	16.03	6.94	0.366	216	4.50	218
5,000	16.14	6.91	0.372	108	4.58	209
6,000	16.12	6.90	0.371	107	4.69	204
7,000	16.19	5.89	0.375	20.8	4.68	204
8,000	16.26	6.93	0.380	30.1	4.67	206
9,000	16.22	6.89	0.380	20.9	4.63	202
10,000	16.24	6.88	0.384	20.6	4.64	205
11,000	16.33	6.89	0.387	2.9	4.69	200

Sample ID: MW-2A
Sample Time: 11:15 am
Pump: Bladder pump with drop screen
Meters: Horiba U52 and water level

Analyzed:
(3) 40 mL for VOAs

Observations
Weather/Temperature: Partly Cloudy, 25-35 F, 20 mph winds
Description: Clear, no odor, no sheen
Free Product? yes no X describe
Sheen? yes no X describe
Odor? yes no X describe
Decontaminated the pump, drop screen and changed bladder.

FIELD OBSERVATION LOG
MONITORING WELL SAMPLE RECORD

SITE 123 Post Avenue – OU1 DATE: 12/18/2018

WELL ID: MW-3
PERSONNEL: Tara Judge

Depth of well (from top of casing) 42.10
Initial static water level (from top of casing) 32.82

Purging Method

Airlift		Centrifugal	
Bailer		Pos. Displ.	
Submersible Pump	X	Peristaltic Pump (Low Flow)	

Well Volume Calculation:
2 in. casing: 9.28 ft. of water x 0.16 = 1.48 gallons
3 in. casing: ft. of water x 0.36 = gallons
4 in. casing: ft. of water x 0.65 = gallons

volume of water removed:
2.4 gal. >3 volumes: yes X no purged dry? yes no X

Field Tests

Volume (mL)	Temp (C°)	pH	Conductivity (ms/cm)	Turbidity (NTUs)	Dissolved Oxygen (mg/l)	ORP (mv)
Initial	14.18	3.90	--	1.6	5.42	260
500	16.09	6.62	0.608	515	3.24	220
1,000	16.27	6.69	0.603	448	3.26	219
2,000	16.37	6.74	0.591	409	3.88	215
3,000	16.48	6.81	0.591	389	3.97	217
4,000	16.49	6.83	0.592	304	3.93	216
5,000	16.55	6.77	0.603	117	3.88	212
6,000	16.57	6.81	0.604	72.8	3.88	213
7,000	16.54	6.80	0.606	48.5	3.88	214
8,000	16.55	6.80	0.606	26.4	3.82	213
9,000	16.62	6.86	0.606	22.1	3.92	213

Sample ID: MW-3
Sample Time: 10:00 am
Pump: Bladder pump with drop screen
Meters: Horiba U52 and water level

Analyzed: Collected MS/MSD.
(9) 40 mL for VOAs

Observations
Weather/Temperature: Partly Cloudy, 25-35 F, 20 mph winds
Description: Clear, no odor, no sheen
Free Product? yes no X describe
Sheen? yes no X describe
Odor? yes no X describe
Decontaminated the pump, drop screen and changed bladder.

ATTACHMENT F

DATA VALIDATION CHECKLISTS

D&B ENGINEERS AND ARCHITECTS, P.C.

DATA VALIDATION CHECKLIST

Project Name:	123 Post Ave
Project Number:	3150-41D
Sample Date(s):	December 18, 2018
Sample Team:	TJ
Matrix/Number of Samples:	Water/ 3 Field Duplicate/ 0 Trip Blank/ 1 Field Blank/ 0
Analyzing Laboratory:	TestAmerica Laboratories, Buffalo, NY
Analyses:	Volatile Organic Compounds (VOCs): by SW846 8260C by NY
Laboratory Report No:	480-172218 Date:1/02/19

ANALYTICAL DATA PACKAGE DOCUMENTATION GENERAL INFORMATION

	Reported		Performance Acceptable		Not
	No	Yes	No	Yes	Required
1. Sample results		X		X	
2. Parameters analyzed		X		X	
3. Method of analysis		X		X	
4. Sample collection date		X		X	
5. Laboratory sample received date		X		X	
6. Sample analysis date		X		X	
7. Copy of chain-of-custody form signed by Lab sample custodian		X		X	
8. Narrative summary of QA or sample problems provided		X		X	

QA - quality assurance

Comments:

The data packages have been reviewed in accordance with the NYSDEC 6/05 ASP Quality Assurance/ Quality Control (QA/QC) requirements. A validation was conducted on the data package and any applicable qualification of the data was determined using the USEPA National Functional Guidelines of Organic Data Review, January 2017, method performance criteria and D&B Engineers and Architects, P.C. professional judgment. The qualification of data discussed within this data validation checklist did not impact the usability of the sample results.

D&B ENGINEERS AND ARCHITECTS, P.C.

Custody Numbers:480-172218
SAMPLE AND ANALYSIS LIST

Sample ID	Lab ID	Sample Collection Date	Parent Sample	Analysis			
				VOC	1,4-Dioxane	PFAS	MISC
MW-3	480-172218-1	12/18/2018		X			
MW-2A	480-172218-2	12/18/2018		X			
MW-1A	480-172218-3	12/18/2018		X			
TRIP BLANK	480-172218-4	12/18/2018		X			

ORGANIC ANALYSES
VOCS

	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Holding times		X		X	
2. Blanks					
A. Method blanks		X		X	
B. Trip blanks		X		X	
C. Field blanks					X
3. Matrix spike (MS) %R		X	X		
4. Matrix spike duplicate (MSD) %R		X		X	
5. MS/MSD precision (RPD)		X		X	
6. Laboratory control sample (LCS) %R		X		X	
7. Surrogate spike recoveries		X		X	
8. Instrument performance check		X		X	
9. Internal standard retention times and areas		X		X	
10. Initial calibration RRF's and %RSD's		X		X	
11. Continuing calibration RRF's and %D's		X	X		
12. Transcriptions – quant report vs. Form I		X		X	

VOCs - volatile organic compounds
%R - percent recovery
%D - percent difference
%RSD - percent relative standard deviation
RRF - relative response factor
RPD - relative percent difference

Comments:
Performance was acceptable, with the following exception:

2B. Methylene chloride was detected om the trip blank. Methylene chloride was not detected in the samples therefore qualification of the data was not necessary.

3. The %Rs were above the QC limits in the MS for chloromethane and cis-1,2-dichloroethene. Cis-1,2-dichloroethene was qualified as estimated (J) in samples MW-2A and MW-3.

11. Chlorotrifluoroethene and vinyl chloride %D were above the QC limit in the continuing calibration. They were not detected, and qualification of the data was not necessary.

D&B ENGINEERS AND ARCHITECTS, P.C.

DATA VALIDATION AND QUALIFICATION SUMMARY

Laboratory Numbers: 480-172218

Sample ID	Analyte(s)	Qualifier	Reason(s)
VOC			
MW-2A and MW-3	Cis-1,2-dichloroethene	J	The %Rs were above the QC limits in the MS

VALIDATION PERFORMED BY & DATE:	Donna M. Brown 5/6/19
VALIDATION PERFORMED BY SIGNATURE: