



STEPHEN D. FLEMING, PE, CHMM  
SENIOR REMEDIATION MANAGER

February 3, 2014

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Mr. Kent Johnson  
Senior Engineering Geologist  
New York State Dept. of Environmental Conservation  
Division of Environmental Remediation  
Remedial Section B – Remedial Bureau E  
625 Broadway  
Albany, NY 12233-7017

**SUBJECT: Q4 2013 Groundwater Monitoring Program Report  
Safety-Kleen Service Center - 60 Seabro Avenue  
North Amityville, New York**

Dear Mr. Johnson:

This letter serves as the Safety-Kleen Systems, Inc. (Safety-Kleen) fourth quarter 2013 groundwater monitoring report for the referenced site (**Attachment 1 - Site Map**).

Groundwater and soil sampling were completed on December 18, 2013 by BE Enviro Metrics (BEE – formerly Basile Environmental Solutions). The samples were sent to Test America, Inc. (TA). TA's New Jersey laboratory performed both the Mineral Spirit Range Organics (MSRO) as well as the Volatile Organic Compound (VOC) analyses. TA holds both NY NELAP and NYDOH ELAP certifications.

Test America (Edison, NJ) continued to analyze MSRO by EPA Method 8260 through the fourth quarter 2013. Safety-Kleen proposes to change this method to EPA Method 8015 for MSRO. Following formal approval from the Department, Safety-Kleen will direct the laboratory to begin the method studies (for soil and water) required to calibrate EPA Method 8015 to Safety-Kleen's 105 mineral spirits formulation as the standard.

Once done, the Department will be notified and correspondence from the Laboratory will be provided documenting its successful completion. With concurrence from the Department, EPA Method 8015 will then be performed for MSRO analysis the next scheduled quarter.

Further, the expanded table requested by Ms. Leary, Assistant Attorney General, will be provided with the first quarter 2014 monitoring report.

## 1.0 QUARTERLY GROUNDWATER SAMPLING PROGRAM

The following was performed during the monitoring event (as required):

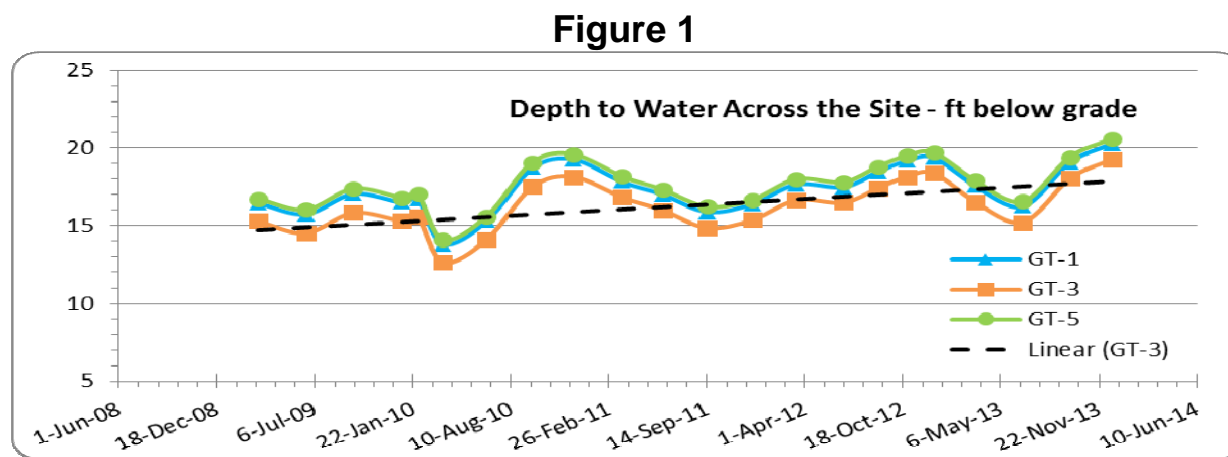
- Prior to sampling, the ORC-A® filter socks were removed from wells GT-1, GT-5 and VE-1R. Following the equilibration of the water table, field and laboratory samples were then collected.
- Measurement of the depth to water (DTW) at each monitoring well, four vapor points and one drywell;
- Monitoring point development for groundwater field/lab parameter measurement;
- Collection of groundwater samples from site monitoring points, and soil samples from one drywell;
- Packing (on ice) and delivery of the sample set to a TA sample collection location, TA courier, or shipment to the laboratory via overnight commercial courier.

### 1.1 Monitoring Point Field Parameter Collection & Summary

Monitoring wells GT-1 through GT-5, VE-1R, VE-5, VP-A, VP-B, and DW-1 were gauged and field indicator parameters were collected. DW-1 was dry.

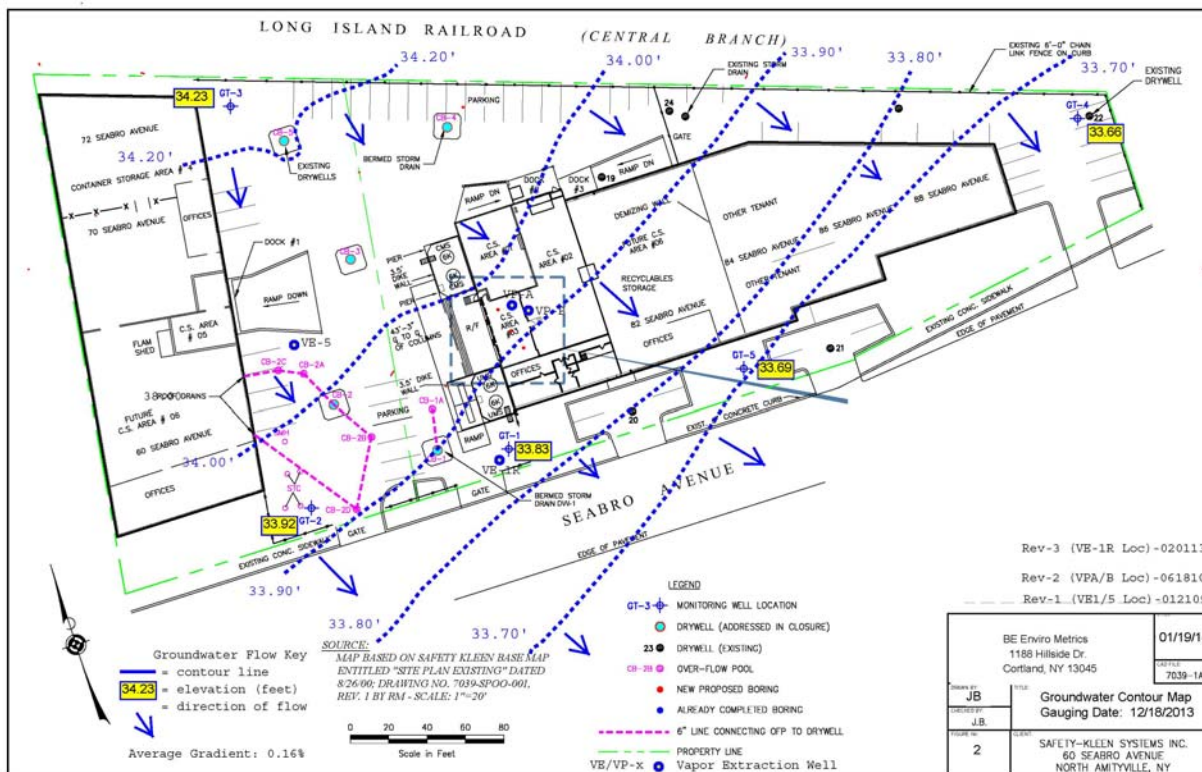
Temperature, pH, conductivity, dissolved oxygen, oxidation/reduction potential (ORP), and visual turbidity were recorded. The field/sampling data is included as **Attachment 2**. The historic to current field data is presented as **Attachment 3 - Table 1**.

Depth-to-water varied seasonally, and ranged from 18.64 (GT-4) to 20.64 (GT-5) feet below grade (interior wells excluded). Comparatively, the water table was on average 1.2 feet deeper than reported in September 2013. The depth to water at selected site monitoring wells is presented below as **Figure 1**. The historical data indicate that the water table is deeper now than reported historically and continues to trend lower.



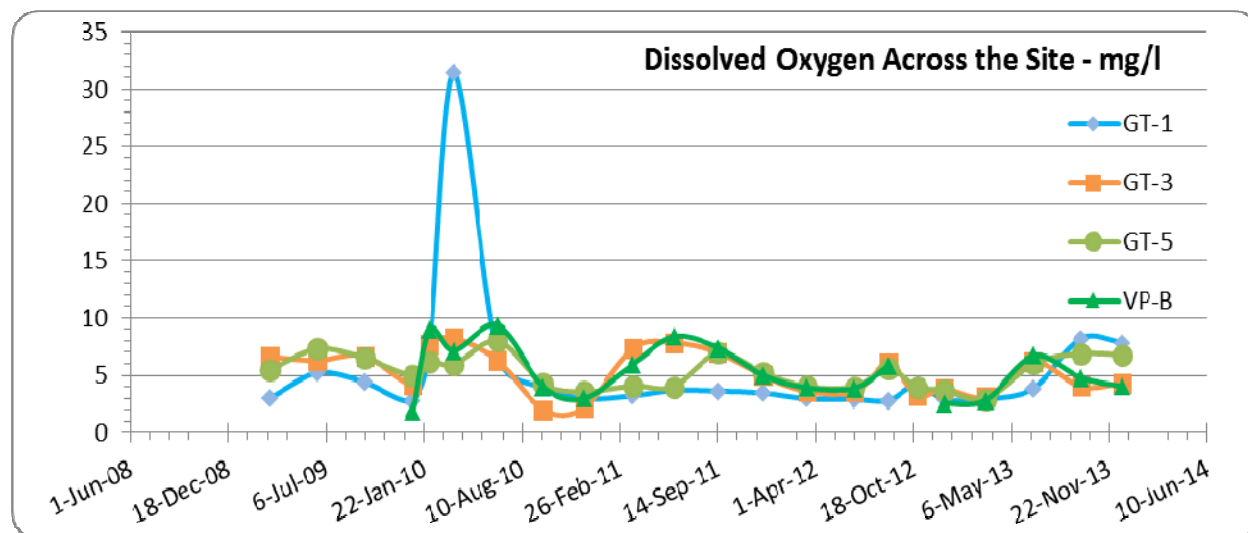
**Figure 2** depicts the flow conditions for December 18, 2013. The direction of groundwater flow was generally consistent with historic trends; south-southeasterly. The average gradient was measured at 0.16 %; very similar to the September 2013 data (0.18 %).

**Figure 2**



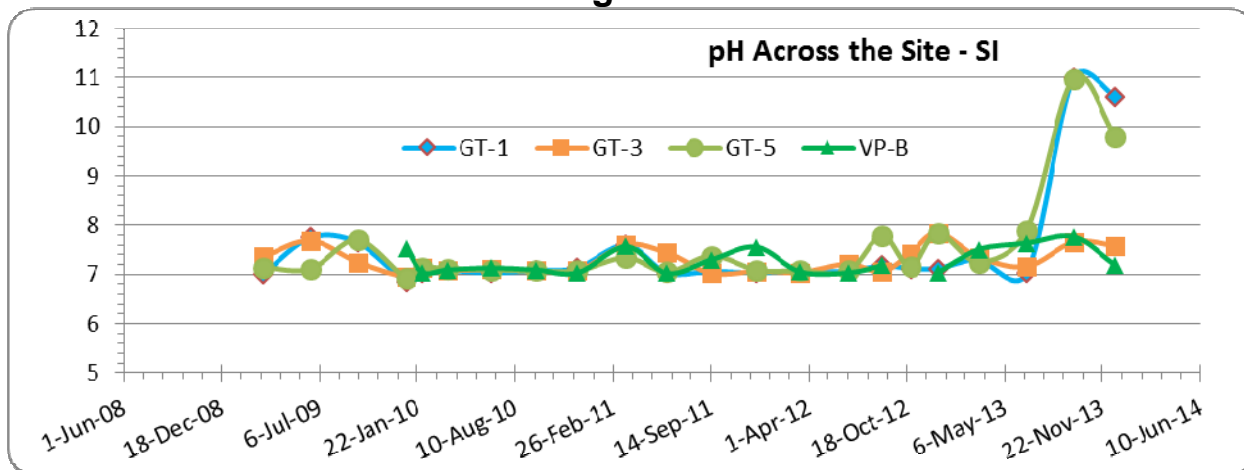
The DO concentrations ranged between 2.47 milligrams/liter (mg/l) at GT-2 to 7.88 mg/l at GT-1. Also it was near 7 at both GT-5 and VE-1R; all three have ORC-A® filter socks installed. The DO at other site wells was similar to historic levels.

**Figure 3**



The pH across the site (**Figure 4**) ranged from 7.05 (GT-2) to 10.62 (GT-1). Also wells GT-5 and VE-1R reported pH at 9.81 and 9.43; all three wells have ORC-A® filter socks installed. These values are lower than reported in Q3. The increase in pH is a known side effect from the ORC-A® dissolution and has occurred at other Safety-Kleen sites that also use ORC-A®. The balance of the wells remained generally within the range (6 - 8) for naturally occurring groundwater.

**Figure 4**



## 1.2 Quarterly Groundwater Sampling

Monitoring wells GT-1, GT-2, GT-3 and GT-5, vapor extraction/monitoring points VE-1R, VE-5, VP-A and VP-B were purged of 3 to 5 well volumes (conditions permitting) of groundwater with a bailer prior to sampling.

Groundwater samples were collected with dedicated, disposable polyethylene bailers and placed into glass containers provided by TA as specified for each analysis. A duplicate sample was collected for quality assurance purposes from well GT-1 (Duplicate). Also, an equipment rinse blank was prepared in the field and submitted.

Samples were kept cool during transport to the laboratory, accompanied by chain-of-custody documents and a trip blank. The samples arrived at the laboratory within acceptable USEPA and NYSDEC holding times and preservation requirements (via laboratory courier the same day). TA analyzed the samples for Volatile Organic Compounds (VOCs) via EPA Method 8260B, and for Mineral Spirit-Range Organics (MSRO) via Modified EPA Method 8260B.

## 1.3 Catch Basin DW-1 Media Sampling

Sand bottom samples were collected from DW-1. Specifically the sample, duplicate, and MS/MSD were retained using disposable, new Geoprobe® - type acetate sleeves. Also an equipment rinsate blank was prepared.

Encore<sup>(R)</sup> tubes were used to retain and preserve the samples. They were placed in a cooler, on-ice and transported to the laboratory via Federal Express, Priority Next AM Delivery. The samples arrived at the laboratory intact and properly preserved. During processing, those tubes retained for analysis for the sample and the duplicate contained different amounts of sand. This was due to the "grab" nature of the samples, with the sample having more, and larger clastic

particles than the duplicate sample. The laboratory noted in the narrative that this condition lead to the incongruous nature of the results. Neither backup samples for either the sample or the duplicate were used by the laboratory to re-analyze the samples, nor was Safety-Kleen informed of the difference in sample weight prior to the data being reported.

## 2.0 QUARTERLY ANALYTICAL RESULTS

Historic (through September 2009) data are presented in **Attachment 3, Table 2**. The groundwater quality data are summarized in **Attachment 3, Table 3**. The laboratory analytical report is included as **Attachment 4** (on CD, executive summary in print).

**VOCS:** Select VOCs were detected above the method detection limits (EPA Method 8260B) in all monitoring points as well as DW-1; none above the respective standards; with the exception of acetone was reported at 84 ppb (standard is 50), in GT-2. Tetrachloroethene (PCE) as well as Trichloroethene were also detected at select locations, but well below standards. The acetone detection is not characteristic of a Safety-Kleen mineral spirit impact, nor was acetone used in the field for any purpose. The result must be confirmed, as it is suspect.

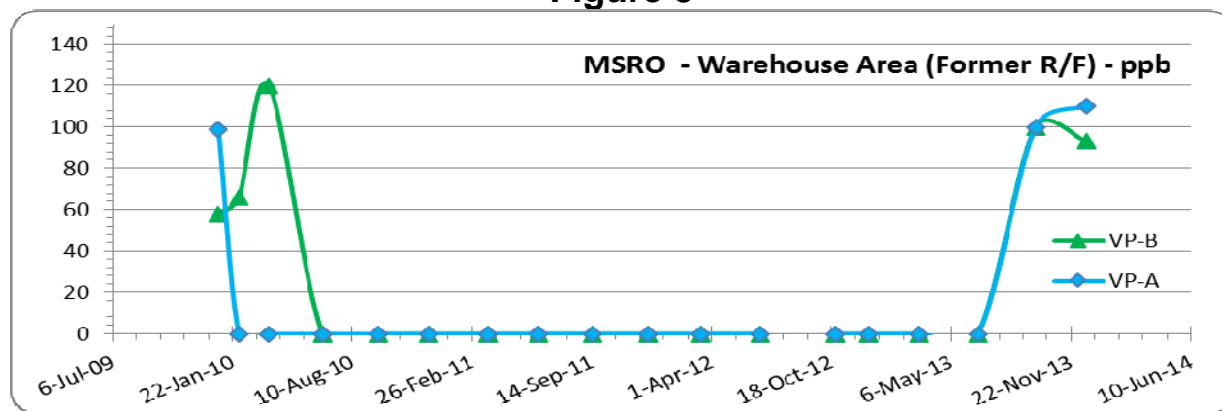
**Attachment 3 - Table 3** summarizes the positive detections noted at and above the regulatory limit/project-specific lab reporting limits. All detections recorded above the method detection limits can be found in the laboratory report Executive Summary (**Attachment 4**).

**Mineral Spirit-Range Organics (MSRO):** MSRO was not detected in groundwater at GT-2 or GT-5. It was reported at GT-1, GT-3, VE-1R, VP-A and VP-B above the method or reporting limits (50 ppb). All concentrations, with the exception of those reported at VE-1R and Well A were reported lower than the previous quarter. GT-1's concentration was significantly lower than previously reported for the September data (41,000 ppb) and was recorded at 5,700 ppb and 5,100 ppb in the duplicate.

The high concentrations reported during both the September and December 2013 sampling, at both VE-1R and GT-1 were due, most likely, to a sheen detected at both locations. During December, only a sheen at VE-1R was reported (44,000 ppb). The hydrophobic nature of mineral spirits can result in a high dissolved concentration, above the solubility of mineral spirits, when even a slight sheen is present, as evidenced by this quarter's VE-1R result.

MSRO concentrations for the Warehouse Area (Container Storage Area-CSA #3) are presented in **Figure 5** below.

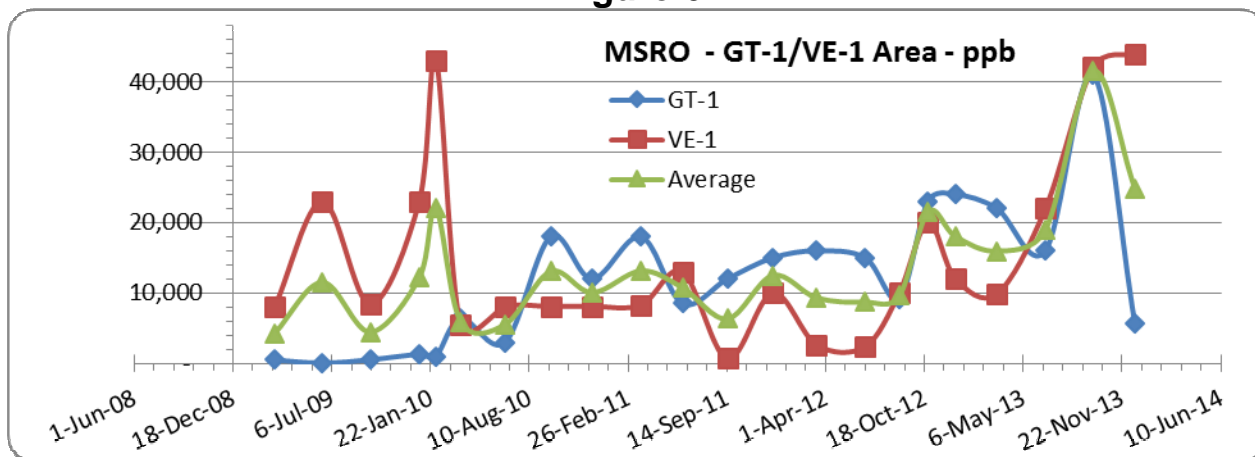
**Figure 5**



The VE-1R results are slightly higher than noted in September 2013. Further is was also reported again at GT-3, VP-A and VP-B at 81 ppb (lower than Q3), 110 ppb (higher) and 93 ppb (lower) respectively. The repeat detection of MSRO at GT-3 (up-gradient well) is not characteristic. There are no historic or current waste management areas in its vicinity.

The MSRO concentrations for the GT-1/VE-1R area are presented in **Figure 6** below. MSRO was not detected in GT-5 again this period.

**Figure 6**



MSRO was detected in the DW-1 sand/sediment bottom sample and it's duplicate at concentrations of 20,000 ug/kg – sample and 10,000 ug/kg in the duplicate. The standard for this site is 10,000 ug/kg. As noted earlier, the results appear to be biased based on the significant differences in the sample volumes used by the laboratory (backup samples were not prepped or used by the laboratory to confirm the results).

### 3.0 SUMMARY

1. Groundwater elevations were lower than recorded last period, on average, by 1.2 feet. The direction and magnitude of groundwater flow is generally similar to historic trends.
2. DO concentrations in wells with ORC-A® filter socks were elevated when compared to historic levels (up to 7.88 mg/l). The balance of the site wells was generally similar to historic levels.
3. Also, the pH at the ORC-A® wells was approximately 10.5 and lower, which is expected, but lower than those levels reported during Q3 2013. The remaining site wells were within the range for naturally occurring groundwater.
4. MSRO remains at concentrations above the requisite standards in the GT-1/VE-1 area; and varied over a wide range. The presence of a sheen, again, at VE-1R is biasing its results high, with reported concentrations well above the solubility of mineral spirits.
5. The detection of MSRO at monitoring GT-3, VP-A and VP-B are not characteristic when compared to the bulk of historical results. GT-3 particularly, given historic, nor current waste management areas were/are located proximal to it.



6. MSRO was detected in DW-1 soil/sediment bottom samples at concentrations at and above the requisite standard post the second cleanout. The results appear to be incongruous, given the significant difference in the sample volumes used by the laboratory.

#### **4.0 RECOMMENDATIONS**

##### **1. Groundwater:**

- a. Continue to deploy oxygen releasing compound filter socks at, GT-1, VE-1R and GT-5, and replace filter socks quarterly or as the groundwater monitoring data suggests.
- b. Install filter socks at wells GT-3, Well A and Well B during the next scheduled quarterly sampling event.
- c. Move forward with the BOS® 200 accelerated remedial program as discussed in our telecom of 1/7/2014. Safety-Kleen will submit the required work plan on February 15, 2014 as agreed.
- d. Complete the first quarter 2014 groundwater sampling and monitoring during February 2014, in advance of its historical March sampling time frame, in lieu of a re-sampling for the Q4 2013 reporting period.

2. **Drywell DW-1:** Either remove additional sand, or replace the excavated sand with like-in-kind material, based on the February 2014 proposed first quarter 2014 groundwater/soil sampling. Subsequent samples will be retained with a stainless steel hand auger in order to reduce incongruous sample volumes.

I am available to discuss the results with you at your convenience. Please do not hesitate to contact me at (513) 956-2172. As always, Safety-Kleen appreciates the Department's assistance with this site.

Sincerely,

**Safety-Kleen Systems, Inc.**



**Stephen D. Fleming, P.E., CHMM**  
Senior Remediation Manager

##### **FIGURES (in text)**

- 1 Depth to Water across the Site
- 2 Groundwater Contour Map
- 3 Dissolved Oxygen across the Site
- 4 pH Across the Site
- 5 MSRO – CSA#3 Area (Former R/F)
- 6 MSRO - GT-1/VE-1 Area

**Attachments & CC List (next page)**

## ATTACHMENTS

- 1 Site Map
- 2 Media Sampling - Field Parameter and Lab Sampling Summaries
- 3 Tables
  - Table 1 – Historic Groundwater Field Data Summary (to Current)
  - Table 2 – Historic Groundwater Chemical Data Summary (Through 9/2009)
  - Table 3 – Historic Groundwater Chemical Data Summary (TA Labs)
- 4 Laboratory Analytical Report (on CD) – Executive Summary Attached

Distribution	
Person/Department	Method of Transmission
E. Badaracco, Town of Babylon, HW Dept., Lindenhurst, NY	hard copy – 1 <sup>st</sup> Class Mail
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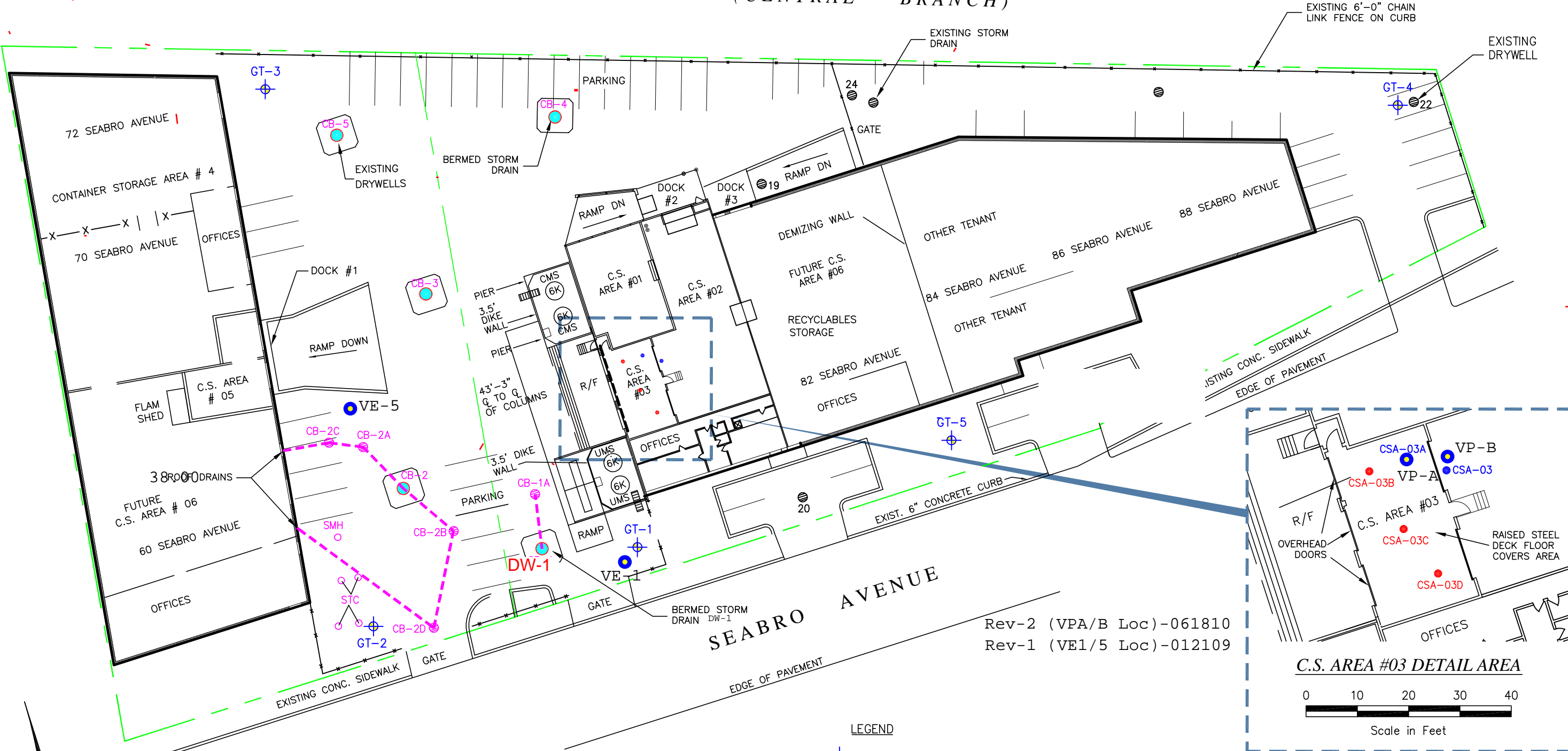
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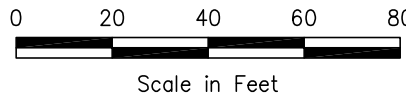
## **ATTACHMENT 1**

### **Site Map**

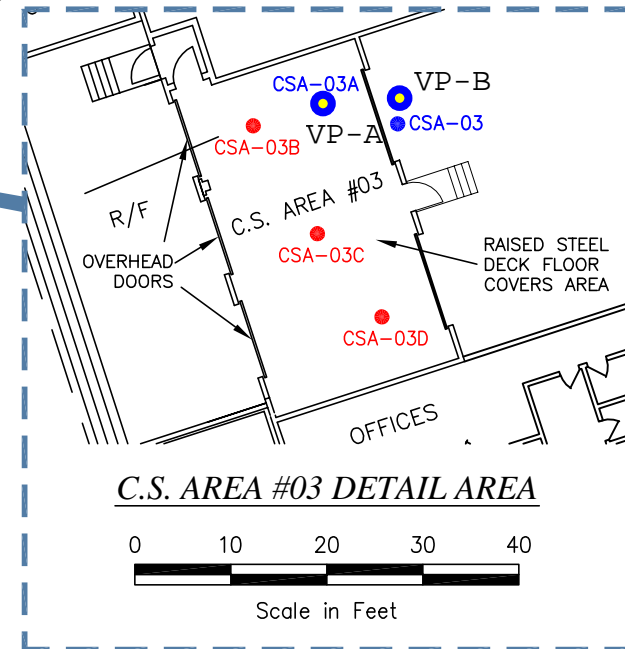
LONG ISLAND RAILROAD (CENTRAL BRANCH)



**SOURCE:**  
MAP BASED ON SAFETY KLEEN BASE MAP  
ENTITLED "SITE PLAN EXISTING" DATED  
8/26/00; DRAWING NO. 7039-SPOO-001,  
REV. 1 BY RM - SCALE: 1"=20'



- LEGEND**
- GT-3 MONITORING WELL LOCATION
  - DRYWELL (ADDRESSED IN CLOSURE)
  - 23 DRYWELL (EXISTING)
  - CB-2B OVER-FLOW POOL
  - NEW PROPOSED BORING
  - ALREADY COMPLETED BORING
  - 6" LINE CONNECTING OFF TO DRYWELL
  - PROPERTY LINE
  - VE/VP-x Vapor Extraction Well



Rev-2 (VPA/B Loc)-061810  
Rev-1 (VE1/5 Loc)-012109

Basile Environmental Solutions, LLC 1188 Hillside Dr. Cortland, NY 13045		5/23/12 SCALE: AS SHOWN CAD FILE: 7039-1A
DRAWN BY: <b>JB</b>	TITLE: <b>SITE PLAN</b>	CLIENT: <b>SAFETY-KLEEN SYSTEMS INC. 60 SEABRO AVENUE NORTH AMITYVILLE, NY</b>
CHECKED BY: <b>J.B.</b>	FIGURE No: <b>1</b>	

## **ATTACHMENT 2**

### **Field Parameters and Lab Sampling Summary**

SAMPLING INSTRUCTIONS & FIELD OBSERVATION LOG										page 1 of 1	
GROUNDWATER SAMPLING RECORD											
SITE NAME		Safety-Kleen Service Center					DATE		18-Dec-13		
		60 Seabro Ave, N.Amityville, NY					Weather		sunny/cold, 28F		
Sampler		Jim Scerra/SEM									
Well Name / ID							Rep VE-1	Inside warehouse			
	GT-1	GT-2	GT-3	GT-4	DW-1	GT-5	VE-1R	VE-5	VP-A	VP-B	
Lab Analysis - EPA 8260b VOCs	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	
Lab Analysis - EPA 8015 MSRO	Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	
Duplicate Sample:	Yes				Yes	Yes					
Sample Equipment Rinse Blank					Yes						
MS/MSD					Yes						
Collect Field Parameters	Yes	Yes	Yes	Yes-Only	Yes	Yes	Yes	Yes	Yes	Yes	
Diameter of Well Casing	2 in	2 in	2 in	2 in	Manhole	2 in	4 in	1 in	2 in	2 in	
Depth of Well (ft.)	26.0	27.40	27.48	26.18	10.50	21.2	24.80	24.80	27.5	23.0	
Depth to Groundwater (ft.)	20.28	20.21	19.29	18.64	Dry	20.60	20.00	19.83	21.69	20.21	
Water Column Height (ft.)	5.72	7.19	8.19	7.54		0.60	4.80	4.97	5.81	2.79	
Volume Purged (gal)	2.5	3.0	4.0	3.5		0.5	7.0	0.2	2.5	1.0	
Purging Method	Bailer	Bailer	Bailer	Bailer		Bailer	Bailer	Tubing	Bailer	Bailer	
Sampling Time	0945	1030	0915	NA	12:30	0800	12:30	8:50	11:45	11:00	
Sample date	18-Dec	18-Dec	18-Dec	NA	18-Dec	18-Dec	18-Dec	18-Dec	18-Dec	18-Dec	
GW Visual Observations											
color	clear	lt gray	clear	rust		clear	lt grey	med brn	lt. brn	med brn	
sheen	no	no	no	no		no	slight	no	no	no	
odor	slight	no	no	no		no	slight	no	no	no	
Field Parameters											
Temperature (C)	16.5	14.6	13.8	16.0		15.1	16.6	13.8	14.7	14.6	
pH	10.62	7.05	7.59	7.48		9.81	9.43	8.01	7.05	7.19	
Conductivity in uS	1070	288	293	143		410	225	119	277	191	
Dissolved Oxygen (mg/L)	7.88	2.47	4.28	3.80		6.81	6.98	3.82	4.92	4.01	
ORP ( Eh (Mv))	18-Dec	4	11	5		14	20	2	-5	-1	
Turbidity (visual / NTU)	low	low	low	high		low	low	high	med	high	
Ozone (mg/l)	0.0	0.0	0.0	0.0		0.0	0.0	0.00	0.0	0.0	
Comments											
	VE-1 - Out of service - 9/7/2012. VE-1R is replacement vent well and groundwater monitoring point - In service 9/7/2012.										

## **ATTACHMENT 3**

### **TABLES**

**Table 1** – Historic Groundwater Field Data Summary (to Current)

**Table 2** – Historic Groundwater Chemical Data Summary (Through 9/09)

**Table 3** – Historic Groundwater Chemical Data Summary (From 12/09-TA Labs)

**Table 1 - Historic Groundwater Field Data Summary (to Current)**

**KEY**

Temperature recorded in C
Conductivity measured in uS
Dissolved Oxygen measured in mg/l
Eh measured in Mv
Ozone measured in mg/l

**GT-1**

**PARAMETER**

	Depth to	Groundwater						
	Water (ft)	Elevation (ft)	Temperature °C	pH	Cond.	D.O.	Eh	Ozone
24-Mar-05	18.29	35.82	12.5	6.50	180	4.9	30	1.38
27-Jun-05	17.20	36.91	16.6	6.33	343	4.67	25	0.07
20-Sep-05	19.12	34.99	18.5	6.17	345	3.98	55	>1.5
13-Dec-05	15.29	38.82	10.7	6.97	157	5.34	<-80	0.10
15-Mar-06	15.07	39.04	12.8	7.02	203	4.27	51	0.34
22-Jun-06	15.81	38.30	15.0	6.64	217	3.95	-48	-0.01
26-Sep-06	17.00	37.11	17.1	7.05	188	2.32	0	-0.70
19-Dec-06	16.53	37.58	16.6	7.05	184	2.40	-36	0.01
27-Mar-07	16.13	37.98	14.0	7.09	462	2.80	-46	0.09
26-Jun-07	16.16	37.95	15.0	7.14	232	1.96	-32	-0.28
20-Sep-07	17.14	36.97	17.3	7.07	171	3.05	-50	0.01
20-Dec-07	18.56	35.55	16.6	7.14	189	2.65	-47	NA
27-Mar-08	15.36	38.75	13.3	7.10	244	2.80	-125	ND
19-Jun-08	16.39	37.72	14.2	7.09	190	2.88	-135	0.07
25-Sep-08	18.10	36.01	17.3	6.22	144	2.23	2	0.20
18-Dec-08	16.20	37.91	16.0	6.53	149	2.95	85	0.09
12-Mar-09	16.47	37.64	12.2	7.00	459	2.96	163	ND
17-Jun-09	15.73	38.38	13.5	7.75	381	5.20	48	0.10
22-Sep-09	17.05	37.06	17.0	7.65	224	4.40	-29	0.10
30-Dec-09	16.49	37.62	15.0	6.85	182	2.80	91	0.08
02-Feb-10	16.75	37.36	13.5	7.03	179	7.35	45	0.00
24-Mar-10	13.80	40.31	12.0	7.08	603	31.50	165	0.60
22-Jun-10	15.30	38.81	15.5	7.03	182	6.57	32	0.00
22-Sep-10	18.70	35.41	17.8	7.08	176	3.98	28	n/m
15-Dec-10	19.28	34.83	15.3	7.13	157	2.95	10	0.00
24-Mar-11	17.83	36.28	13.0	7.60	198	3.21	25	0.00
16-Jun-11	17.01	37.10	14.7	7.03	259	3.68	20	0.02
15-Sep-11	15.88	38.23	19.0	7.06	197	3.62	-62	0.00
16-Dec-11	16.40	37.71	16.0	7.03	186	3.45	-55	0.00
14-Mar-12	17.65	36.46	14.2	7.06	136	2.95	-60	0.00
20-Jun-12	17.48	36.63	16.8	7.06	138	2.88	-45	0.00
28-Aug-12	18.46	35.65	18.0	7.18	118	2.80	-75	0.00
25-Oct-12	19.18	34.93	18.0	7.12	196	4.22	11	0.20
20-Dec-12	19.38	34.73	15.7	7.12	119	2.88	-50	0.00
14-Mar-13	17.57	36.54	12.1	7.30	137	2.90	-20	0.00
20-Jun-13	16.23	37.88	14.8	7.02	213	3.87	-11	0.00
24-Sep-13	19.07	35.04	17.1	11.00	637	8.22	25	0.00
18-Dec-13	20.28	33.83	16.5	10.62	1070	7.88	2.47tba	0.00



**GT-2****PARAMETER**

Sampling Date	Depth to	Groundwater	Temperature °C	pH	Cond.	D.O.	Eh	Ozone
	Water (ft)	Elevation (ft)						
24-Mar-05	17.15	36.98	12.7	6.41	520	2.8	215	1.50
27-Jun-05	16.95	37.18	15.8	7.23	518	2.78	150	0
20-Sep-05	19.65	34.48	17.1	6.53	500	3.01	125	>1.5
13-Dec-05	15.22	38.91	16.5	7.01	353	3.51	130	>1.5
15-Mar-06	14.97	39.16	12.6	6.87	581	4.56	193	1.11
22-Jun-06	15.69	38.44	16.8	6.50	704	4.45	184	0.07
26-Sep-06	16.89	37.24	17.5	7.09	781	2.93	135	0.10
19-Dec-06	16.42	37.71	14.6	7.06	473	2.88	39	0.27
27-Mar-07	16.01	38.12	13.7	7.09	466	3.05	2	0.45
26-Jun-07	16.03	38.10	15.8	7.12	659	2.76	41	0.60
20-Sep-07	17.02	37.11	17.1	7.08	628	3.11	14	0.27
20-Dec-07	18.48	35.65	14.7	7.07	333	3.10	20	NA
27-Mar-08	15.25	38.88	13.1	7.06	342	2.95	-104	ND
19-Jun-08	16.30	37.83	15.2	7.13	478	2.50	-100	0.05
25-Sep-08	18.00	36.13	16.7	6.21	350	1.58	215	0.09
18-Dec-08	16.15	37.98	15.0	6.38	399	1.97	-100	0.10
12-Mar-09	16.38	37.75	12.9	7.14	500	0.77	167	ND
17-Jun-09	15.63	38.50	13.0	7.63	270	3.29	57	0.06
22-Sep-09	16.95	37.18	17.0	7.01	711	2.00	77	0.40
30-Dec-09	16.40	37.73	14.2	6.95	427	2.05	95	0.02
02-Feb-10	16.66	37.47	12.8	7.14	330	2.84	232	0.00
24-Mar-10	13.70	40.43	12.7	7.11	452	2.00	92	0.00
22-Jun-10	15.10	39.03	16.5	7.14	1064	1.17	-29	0.00
22-Sep-10	18.61	35.52	17.0	7.09	302	2.55	-33	n/m
15-Dec-10	19.22	34.91	13.8	7.09	384	2.80	-40	0.00
24-Mar-11	17.77	36.36	11.6	7.05	530	3.14	-25	0.00
16-Jun-11	16.90	37.23	16.0	7.02	667	3.36	-30	0.00
15-Sep-11	15.77	38.36	19.0	7.06	644	2.92	-141	0.00
16-Dec-11	16.33	37.80	15.1	7.10	476	3.05	-105	0.00
13-Mar-12	17.57	36.56	14.0	7.05	403	3.00	-55	0.00
20-Jun-12	17.40	36.73	16.8	7.08	426	2.68	-38	0.00
28-Aug-12	18.36	35.77	18.5	7.17	398	3.07	-40	0.00
25-Oct-12	19.10	35.03	17.5	7.06	315	2.11	-10	0.00
20-Dec-12	19.30	34.83	15.3	7.42	319	3.50	-55	0.00
14-Mar-13	17.50	36.63	12.1	7.32	317	3.05	-40	0.00
20-Jun-13	16.13	38.00	16.0	7.11	350	2.31	-21	0.00
24-Sep-13	19.00	35.13	17.2	7.05	404	2.04	-2	0.00
18-Dec-13	20.21	33.92	14.6	7.05	288	2.47	4	0.00

**GT-3****PARAMETER**

<b>Sampling Date</b>	<b>Depth to Water (ft)</b>	<b>Groundwater Elevation (ft)</b>	<b>Temperature °C</b>	<b>pH</b>	<b>Cond.</b>	<b>D.O.</b>	<b>Eh</b>	<b>Ozone</b>
24-Mar-05	17.05	36.47	10.5	8.30	80	5.85	160	1.48
27-Jun-05	15.95	37.57	16.0	6.71	211	7.94	175	0.02
20-Sep-05	18.53	34.99	17.8	6.30	215	6.90	100	0.20
13-Dec-05	14.11	39.41	15.5	7.43	235	7.40	130	0.05
15-Mar-06	13.85	39.67	11.9	7.26	396	9.10	184	0.20
22-Jun-06	14.56	38.96	15.0	7.26	257	6.20	190	-0.12
26-Sep-06	15.80	37.72	18.4	7.08	253	5.66	102	0.04
19-Dec-06	15.34	38.18	16.2	7.05	251	4.20	68	0.05
27-Mar-07	14.91	38.61	12.1	7.07	225	3.95	-33	0.10
26-Jun-07	14.96	38.56	13.5	7.07	205	3.40	50	-0.32
20-Sep-07	15.87	37.65	18.9	7.06	287	4.10	-25	0.18
20-Dec-07	17.40	36.12	14.9	7.11	164	3.15	65	NA
27-Mar-08	14.15	39.37	12.0	7.53	202	3.15	-82	0.22
19-Jun-08	15.20	38.32	14.4	7.09	168	3.00	-75	0.15
25-Sep-08	16.89	36.63	18.1	6.27	172	5.30	182	0.11
18-Dec-08	15.05	38.47	13.0	6.85	89	7.75	93	0.20
12-Mar-09	15.28	38.24	11.7	7.36	214	6.60	125	0.20
17-Jun-09	14.52	39.00	13.3	7.69	219	6.30	68	0.10
22-Sep-09	15.83	37.69	18.0	7.25	300	6.70	50	0.01
30-Dec-09	15.31	38.21	14.4	6.95	186	4.22	97	0.05
02-Feb-10	15.58	37.94	13.2	7.13	215	7.68	243	0.05
24-Mar-10	12.63	40.89	10.9	7.08	174	8.24	118	0.00
22-Jun-10	14.11	39.41	16.0	7.10	226	6.30	49	0.00
22-Sep-10	17.49	36.03	18.0	7.07	176	2.00	55	n/m
15-Dec-10	18.15	35.37	14.2	7.07	120	2.18	15	0.00
24-Mar-11	16.84	36.68	10.7	7.60	160	7.36	15	0.00
16-Jun-11	16.00	37.52	14.0	7.44	226	7.85	21	0.00
15-Sep-11	14.85	38.67	19.0	7.02	158	6.99	-37	0.00
16-Dec-11	15.37	38.15	16.0	7.06	189	4.95	-42	0.00
14-Mar-12	16.65	36.87	14.0	7.04	191	3.58	-30	0.00
20-Jun-12	16.49	37.03	16.0	7.21	82	3.54	-10	0.00
28-Aug-12	17.41	36.11	20.2	7.05	402	6.01	-11	0.00
25-Oct-12	18.15	35.37	18.4	7.43	134	3.18	-11	0.00
20-Dec-12	18.37	35.15	15.3	7.85	97	3.81	25	0.00
14-Mar-13	16.54	36.98	11.1	7.35	314	3.10	9	0.00
20-Jun-13	15.21	38.31	15.6	7.16	135	6.15	7	0.00
24-Sep-13	18.03	35.49	17.5	7.66	189	4.01	14	0.00
18-Dec-13	19.29	34.23	13.8	7.59	293	4.28	11	0.00

**GT-4****PARAMETER**

Sampling Date	Depth to Water (ft)	Groundwater Elevation (ft)	Temperature °C	pH	Cond.	D.O.	Eh	Ozone
24-Mar-05	19.85	32.45	12.8	7.10	90	3.55	120	n/c
27-Jun-05	15.75	36.55	15.4	6.33	133	5.50	105	meter fault
20-Sep-05	16.25	Anomalous WL	16.5	6.93	139	2.52	115	>1.5
13-Dec-05	13.68	38.62	15.5	7.01	141	5.85	115	>1.5
15-Mar-06	13.48	38.82	11.6	6.86	200	4.92	46	>1.5
22-Jun-06	14.22	38.08	13.4	7.26	239	4.50	-56	>1.5
26-Sep-06	15.40	36.90	17.0	7.04	197	2.10	-40	>1.5
19-Dec-06	14.88	37.42	16.3	7.03	172	1.95	-70	>1.5
27-Mar-07	14.51	37.79	12.7	7.06	162	2.02	-55	>1.5
26-Jun-07	14.56	37.74	13.0	7.07	169	2.00	-116	>1.5
20-Sep-07	15.52	36.78	16.8	7.03	149	2.70	-40	over range
20-Dec-07	16.97	35.33	16.4	7.04	130	2.75	-44	NA
27-Mar-08	13.75	38.55	12.2	7.10	149	2.50	-70	over range
19-Jun-08	14.78	37.52	13.4	7.08	112	3.50	-45	over range
25-Sep-08	16.46	35.84	16.0	6.50	174	1.92	-12	over range
18-Dec-08	14.60	37.70	15.7	7.80	111	1.94	-94	over range
12-Mar-09	14.80	37.50	12.0	7.45	188	5.06	103	over range
17-Jun-09	14.06	38.24	12.9	7.88	231	3.50	-45	over range
22-Sep-09	15.44	36.86	16.3	8.22	163	2.93	-8	over range
30-Dec-09	14.85	37.45	15.0	7.75	171	2.05	75	over range
02-Feb-10	15.11	37.19	11.9	7.11	268	5.26	76	over range
24-Mar-10	12.14	40.16	11.8	7.03	160	6.88	22	over range
22-Jun-10	13.61	38.69	14.0	7.08	73	3.01	65	over range
22-Sep-10	17.12	35.18	16.9	7.04	212	2.82	49	n/m
15-Dec-10	17.65	34.65	16.8	7.02	232	3.05	50	0.00
24-Mar-11	16.20	36.10	12.8	7.70	190	4.20	50	0.00
16-Jun-11	15.42	36.88	13.5	7.03	130	3.50	30	0.00
15-Sep-11	14.31	37.99	17.0	7.32	154	3.85	15	0.00
16-Dec-11	14.73	37.57	16.8	7.13	177	3.58	10	over range
14-Mar-12	16.03	36.27	14.3	7.03	197	3.95	11	over range
20-Jun-12	15.89	36.41	15.2	7.05	188	4.20	15	over range
28-Aug-12	16.90	35.40	17.2	7.10	190	2.60	10	over range
25-Oct-12	17.57	34.73	18.0	7.14	150	3.55	20	over range
20-Dec-12	17.73	34.57	16.5	8.20	119	4.05	-22	0.00
14-Mar-13	15.96	36.34	13.3	7.88	121	4.00	-10	0.00
20-Jun-13	14.65	37.65	14.0	8.14	143	3.05	-5	0.00
24-Sep-13	17.50	34.80	15.9	7.41	119	3.22	1	0.00
18-Dec-13	18.64	33.66	16.0	7.48	143	3.80	5	0.00

**GT-5****PARAMETER**

Sampling Date	Depth to Water (ft)	Groundwater Elevation (ft)	Temperature °C	pH	Cond.	D.O.	Eh	Ozone
24-Mar-05	17.65	36.64	13.5	6.21	217	3.40	130	1.16
27-Jun-05	17.50	36.79	14.8	6.13	205	7.29	135	0.23
20-Sep-05	19.33	34.96	15.6	6.13	210	6.51	-0.61	0.00
13-Dec-05	15.63	38.66	14.2	6.61	162	6.81	110	0.27
15-Mar-06	15.40	38.89	12.5	6.72	189	7.45	156	0.20
22-Jun-06	16.13	38.16	15.0	6.16	180	6.58	150	0.07
26-Sep-06	17.32	36.97	14.9	7.12	333	6.18	100	0.15
19-Dec-06	16.82	37.47	15.0	7.05	219	5.05	62	0.11
27-Mar-07	16.46	37.83	14.1	7.12	185	4.96	48	0.12
26-Jun-07	16.50	37.79	15.0	7.13	215	3.69	36	0.11
20-Sep-07	17.46	36.83	14.6	7.03	286	4.30	35	0.18
20-Dec-07	18.88	35.41	15.5	7.10	310	4.22	60	NA
27-Mar-08	15.68	38.61	13.5	7.12	219	3.88	-74	ND
19-Jun-08	16.70	37.59	14.5	7.11	189	3.95	-50	0.15
25-Sep-08	18.41	35.88	14.8	6.11	255	4.80	131	0.12
18-Dec-08	16.55	37.74	14.5	6.85	184	7.10	54	0.08
12-Mar-09	16.75	37.54	13.2	7.14	190	5.44	127	0.10
17-Jun-09	16.03	38.26	14.5	7.11	221	7.30	50	0.15
22-Sep-09	17.4	36.89	15.0	7.71	452	6.51	34	0.09
30-Dec-10	16.81	37.48	12.5	6.92	231	4.96	112	0.10
02-Feb-10	17.03	37.26	12.9	7.13	315	6.21	113	0.00
24-Mar-10	14.1	40.19	13.0	7.12	218	5.95	217	0.00
22-Jun-10	15.61	38.68	15.0	7.09	207	8.02	-46	0.00
22-Sep-10	19.08	35.21	15.4	7.07	294	4.25	-35	n/m
15-Dec-10	19.61	34.68	14.8	7.07	243	3.55	-10	0.00
24-Mar-11	18.18	36.11	13.9	7.34	326	4.08	-15	0.00
16-Jun-11	17.33	36.96	15.0	7.05	236	4.00	-10	0.00
15-Sep-11	16.23	38.06	17.0	7.38	142	6.95	6	0.00
16-Dec-11	16.68	37.61	15.7	7.09	173	5.20	10	0.00
14-Mar-12	18.00	36.29	15.2	7.07	302	4.02	15	0.00
20-Jun-12	17.81	36.48	15.8	7.07	315	4.00	15	0.00
28-Aug-12	18.81	35.48	16.1	7.80	186	5.59	11	0.00
25-Oct-12	19.51	34.78	15.8	7.15	232	3.95	14	0.00
20-Dec-12	19.71	34.58	15.0	7.84	110	3.70	40	0.00
14-Mar-13	17.90	36.39	12.0	7.25	516	2.88	-8	0.00
20-Jun-13	16.56	37.73	15.1	7.90	129	6.03	2	0.00
24-Sep-13	19.42	34.87	15.0	10.98	991	6.88	10	0.00
18-Dec-13	20.60	33.69	15.1	9.81	410	6.81	14	0.00

# VE-1

## PARAMETER

Sampling Date	Depth to Water (ft)	Temperature °C	pH	Cond.	D.O.	Eh	Ozone
24-Mar-05	N/C	n/c	n/c	n/c	n/c	n/c	0.17
27-Jun-05	17.14	17.0	7.41	457	6.52	140	0.08
20-Sep-05	Dry						
13-Dec-05	15.43	13.5	7.01	111	2.95	<-80	>1.5
15-Mar-06	15.20	NA	7.35	177	N/A	-100	>1.5
22-Jun-06	15.92	16.0	6.89	351	3.00	3.88	>1.5
26-Sep-06	17.10	19.4	7.06	529	3.58	-105	0.22
19-Dec-06	16.63	14.8	7.05	248	3.15	-113	0.25
27-Mar-07	16.23	13.7	7.07	322	2.44	-60	0.2
26-Jun-07	16.29	17.0	7.12	509	1.66	-114	0.10
20-Sep-07	17.25	19.2	7.05	408	2.05	-50	0.11
20-Dec-07	18.62	14.8	7.12	234	2.99	-110	NA
27-Mar-08	15.47	11.4	7.11	268	3.15	-178	0.10
19-Jun-08	16.50	16.0	7.10	181	2.05	-200	over range
25-Sep-08	18.20	19.2	6.53	470	2.60	-106	over range
18-Dec-08	16.32	15.0	6.63	175	1.86	-83	over range
12-Mar-09	16.57	12.0	6.94	212	5.63	178	0.11
17-Jun-09	15.53	17.0	7.84	388	1.97	-109	over range
22-Sep-09	17.15	19.2	7.64	547	1.60	-123	0.03
30-Dec-09	16.59	12.0	6.75	334	1.66	-49	0.09
02-Feb-10	16.83	12.0	7.09	221	2.60	-15	0.02
24-Mar-10	13.90	12.1	7.39	392	34.70	202	over range
22-Jun-10	15.36	17.1	7.08	261	3.93	-60	0.00
22-Sep-10	DRY						
15-Dec-10	DRY						
24-Mar-11	17.95	11.8	7.10	267	4.42	-10	0.00
16-Jun-11	17.13	16.8	7.02	251	3.26	-15	0.00
15-Sep-11	16.00	19.5	7.09	184	1.61	-122	0.00
16-Dec-11	16.51	14.2	7.00	181	1.88	-104	0.00
14-Mar-12	17.78	14.6	7.20	205	1.80	-120	0.00
20-Jun-12	17.62	18.5	7.10	229	2.10	-105	0.00
28-Aug-12	DRY						
25-Oct-12	18.90	VE-1R-Inst 9/7/12	7.17	232	3.95	14	0.18
20-Dec-12	19.10		7.02	141	1.88	-50	0.00
14-Mar-13	17.29		7.21	169	2.05	-50	0.00
20-Jun-13	16.03		7.07	234	2.20	-10	0.00
24-Sep-13	18.75		10.73	492	6.90	18	0.00
18-Dec-13	20.00		9.43	225	6.98	20	0.00

**VE-5****PARAMETER**

Sampling Date	Depth to Water (ft)	Temperature °C	pH	Cond.	D.O.	Eh	Ozone
24-Mar-05	19.64	12.1	6.91	230	4.45	190	0.57
27-Jun-05	16.65	16.7	7.02	235	6.83	125	meter fault
20-Sep-05	18.45	20.0	6.53	238	7.83	100	>1.5
13-Dec-05	5.51	15.0	7.10	240	5.51	105	>1.5
15-Mar-06	14.62	12.0	7.05	240	4.95	165	>1.5
22-Jun-06	15.35	16.0	7.10	251	3.85	150	>1.5
26-Sep-06	16.47	18.0	7.11	240	2.95	157	>1.5
19-Dec-06	16.00	14.1	7.06	263	2.99	29	>1.5
03-Jan-00	15.60	14.5	7.11	226	2.71	8	>1.5
26-Jun-07	15.64	17.3	7.15	212	1.58	15	>1.5
20-Sep-07	16.60	18.0	7.04	201	2.50	-30	over range
20-Dec-07	18.03	13.8	7.14	232	2.80	32	NA
27-Mar-08	14.84	11.0	7.09	198	3.00	-95	ND
19-Jun-08	15.88	16.4	7.16	227	2.85	-100	0.1
25-Sep-08	17.60	18.2	6.04	215	6.18	195	0.05
18-Dec-08	15.70	14.0	6.42	224	6.32	121	0.35
12-Mar-09	15.94	12.0	6.94	212	5.63	178	0.11
17-Jun-09	15.20	15.5	8.01	259	5.60	55	0.06
22-Sep-09	16.53	19.0	7.50	313	9.65	30	0.01
30-Dec-09	15.97	13.0	6.55	249	5.22	131	over range
02-Feb-10	16.23	12.5	7.12	252	8.00	382	over range
24-Mar-10	13.26	12.5	7.13	218	8.20	153	over range
22-Jun-10	14.76	16.8	7.10	275	8.16	-36	over range
22-Sep-10	18.20	19.0	7.04	210	3.20	-40	n/m
15-Dec-10	18.80	15.0	7.08	221	3.05	20	0
24-Mar-11	17.33	11.9	7.12	188	6.02	5	0
16-Jun-11	16.50	15.8	7.04	255	6.15	7	over range
14-Sep-11	15.38	18.0	7.04	184	4.70	37	0
16-Dec-11	15.90	14.6	7.08	220	3.85	25	over range
14-Mar-12	17.14	14.8	7.07	188	3.25	10	over range
20-Jun-12	17.00	18.0	7.07	162	3.05	2	over range
28-Aug-12	17.95	18.4	7.15	205	5.20	10	over range
25-Oct-12	N/S						
20-Dec-12	18.90	15.0	7.03	163	3.80	11	0.00
14-Mar-13	17.07	11.0	7.20	163	3.71	18	0.00
20-Jun-13	15.57	17.4	7.40	257	6.70	14	0.00
24-Sep-13	18.59	17.8	7.62	180	4.01	5	0.00
18-Dec-13	19.83	13.8	8.01	119	3.82	2	0.00



**DW-1****PARAMETER**

<b>Sampling Date</b>	<b>Depth to Water (ft)</b>		<b>Temperature °C</b>	<b>pH</b>	<b>Cond.</b>	<b>D.O.</b>	<b>Eh</b>	<b>Ozone</b>
24-Mar-05			7.7	7.51	543	5.8	95	n/c
27-Jun-05			20.6	6.53	105	1.94	125	0
20-Sep-05	9.50		25.5	6.27	110	1.87	-35	0
13-Dec-05	6.95		12.0	7.41	43	11.21	45	0
15-Mar-06	10.36		8.6	7.78	97	7.41	102	0.1
22-Jun-06	8.90		18.5	7.46	66	7.00	88	-0.08
26-Sep-06	8.36		22.4	7.03	65	3.74	34	0.05
19-Dec-06	10.35		12.5	7.31	94	4.25	-41	-0.01
27-Mar-07	8.70		8.5	7.16	209	5.2	-60	-0.08
26-Jun-07	8.98		21.3	7.13	67	4.80	-25	0.10
20-Sep-07	9.58		23.0	7.08	63	6.70	-46	0.07
20-Dec-07	7.65		8.5	7.02	72	5.28	25	NA
27-Mar-08	7.90		8.1	7.21	82	4.85	-123	ND
19-Jun-08	4.30		22.4	7.13	56	6.55	-10	0.08
25-Sep-08	DRY		n/a	n/a	n/a	n/a	n/a	n/a
18-Dec-08	DRY	soil sample coll.	n/a	n/a	n/a	n/a	n/a	n/a
12-Mar-09	10.48	soil sample coll.	13.0	7.30	65	6.55	-8	ND
17-Jun-09	DRY	soil sample coll.	n/a	n/a	n/a	n/a	n/a	n/a
22-Sep-09	DRY	soil sample coll.	n/a	n/a	n/a	n/a	n/a	n/a
30-Dec-09	DRY	soil sample coll.	n/a	n/a	n/a	n/a	n/a	n/a
02-Feb-10	DRY	soil sample coll.	n/a	n/a	n/a	n/a	n/a	n/a
24-Mar-10	DRY	soil sample coll.	soil sample wet	n/a	n/a	n/a	n/a	n/a
22-Jun-10	DRY	soil sample coll.	n/a	n/a	n/a	n/a	n/a	n/a
22-Sep-10	DRY	soil sample coll.	n/a	n/a	n/a	n/a	n/a	n/a
15-Dec-10	DRY	soil sample coll.	n/a	n/a	n/a	n/a	n/a	n/a
24-Mar-11	9.82		8.5	7.10	25	10.50	80	0.00
16-Jun-11	8.58		22.0	7.09	67	5.60	45	0.00
15-Sep-11	DRY	soil sample coll.						
16-Dec-11	DRY	soil sample coll.						
14-Mar-12	DRY	soil sample coll.						
20-Jun-12	DRY	soil sample coll.						
28-Aug-12	N/S							
25-Oct-12	DRY	soil sample coll.						
14-Mar-13	DRY	soil sample coll.						
20-Jun-13	DRY	soil sample coll.						
24-Sep-13	DRY	soil sample coll.						
18-Dec-13	DRY	soil sample coll.						

**VP-A**

<b>Sampling Date</b>	<b>Depth to Water (ft)</b>		<b>Temperature °C</b>	<b>pH</b>	<b>Cond.</b>	<b>D.O.</b>	<b>Eh</b>	<b>Ozone</b>
30-Dec-09		Not Accessible						
02-Feb-10	18.13		14.1	7.11	350	9.15	224	0.00
24-Mar-10	15.18		13.5	7.11	271	9.66	144	over range
22-Jun-10	16.50		15.5	7.13	188	10.23	-60	over range
22-Sep-10	20.05		17.5	7.11	376	3.95	-45	n/m
15-Dec-10	20.68		16.0	7.06	292	3.55	-35	0.00
24-Mar-11	19.20		13.5	7.10	255	6.10	-20	0.00
16-Jun-11	18.40		13.8	7.57	318	8.30	-12	0.00
15-Sep-11	17.30		18.0	7.07	90	7.30	28	0.00
16-Dec-11	17.79		16.6	7.06	233	5.88	15	0.00
14-Mar-12	19.06		14.8	7.03	254	4.01	20	0.00
20-Jun-12	18.90		15.5	7.04	294	3.55	18	0.00
28-Aug-12	19.84		16.8	7.16	367	6.20	8	0.00
25-Oct-12	N/S							
20-Dec-12	20.78		16.0	7.02	255	1.80	-22	0.00
14-Mar-13	17.07		11.0	7.20	163	3.71	18	0.00
20-Jun-13	17.63		14.1	7.28	250	7.05	-1	0.00
24-Sep-13	20.49		16.9	7.70	156	5.01	-10	0.00
18-Dec-13	21.69		14.7	7.05	277	4.92	-5	0.00

**VP-B****PARAMETER**

<b>Sampling Date</b>	<b>Depth to Water (ft)</b>	<b>Temperature °C</b>	<b>pH</b>	<b>Cond.</b>	<b>D.O.</b>	<b>Eh</b>	<b>Ozone</b>
30-Dec-09	16.28	15.1	7.53	211	1.79	170	0.03
02-Feb-10	16.55	14.1	7.04	340	9.01	190	over range
24-Mar-10	13.68	13.8	7.09	229	7.14	137	over range
22-Jun-10	15.08	15.5	7.13	245	9.40	12	over range
22-Sep-10	18.61	17.0	7.09	370	4.00	16	n/m
15-Dec-10	19.20	14.9	7.03	370	2.97	20	0.00
24-Mar-11	17.75	13.8	7.57	196	5.95	-15	0.00
16-Jun-11	16.92	14.0	7.02	161	8.39	-19	over range
15-Sep-11	15.81	17.5	7.30	96	7.40	-27	0.00
16-Dec-11	16.30	16.3	7.56	171	4.99	-30	over range
14-Mar-12	17.57	14.5	7.05	198	3.91	-15	over range
20-Jun-12	17.40	15.8	7.03	150	3.88	-10	over range
28-Aug-12	18.39	17.0	7.18	164	5.88	-25	over range
25-Oct-12	N/S						
20-Dec-12	19.30	16.0	7.03	183	2.55	-30	0.00
14-Mar-13	17.53	13.2	7.51	503	2.80	-22	0.00
20-Jun-13	16.16	13.7	7.64	157	6.72	-10	0.00
24-Sep-13	19.00	16.8	7.77	170	4.80	-2	0.00
18-Dec-13	20.21	14.6	7.19	191	4.01	-1	0.00

**Table 2**  
**Historic Groundwater Chemical Data Summary (Through 9/09)**  
**S-K N. Amityville, NY**

Well ID	TOC av. Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl-benzene (ug/l)	Xylenes (ug/l)	Chloro-benzene (ug/l)	1,2-DCB (ug/l)	1,3-DCB (ug/l)	1,4-DCB (ug/l)	1,2-DCE (ug/l)	1,1,1-TCA (ug/l)	trans -1,2-DCE (ug/l)	Mineral Spirits (ug/l)	Total VOCs (ug/l)
GW STND		1	5	5	5	5	3	3	3	5	5	5	50	
<b>GT-1</b>	3/14/1994	ND	ND	51	410	170	ND	21	81	ND	ND	ND	NS	733
	2/9/1996	ND	ND	5	49	19	13	ND	12	ND	ND	ND	444	98
	5/28/1996	ND	ND	ND	16	24	10	ND	13	ND	ND	ND	186	63
DUPE	5/28/1996	ND	ND	ND	16	23	ND	ND	13	11	ND	ND	244	63
	8/22/1996	ND	ND	8	76	41	20	5	23	ND	ND	ND	588	173
	12/2/1996	ND	ND	ND	42	18	10	ND	10	ND	ND	ND	NS	80
	2/27/1997	ND	ND	ND	34	16	7	ND	8	ND	ND	ND	113	65
SPLIT	2/27/1997	ND	ND	1	29	17	9	3	13	ND	ND	ND	170	72
	5/28/1997	ND	ND	6	52	22	12	ND	11	ND	ND	ND	ND	103
DUPE	5/28/1997	ND	ND	6	52	22	12	ND	11	ND	ND	ND	ND	103
SPLIT	5/28/1997	ND	ND	6	47	20	9	ND	10	ND	ND	ND	51	92
	9/9/1997	ND	ND	22	167	73	33	9	38	ND	ND	ND	308	343
DUPE	9/9/1997	ND	ND	19	150	65	29	9	33	ND	ND	ND	277	304
SPLIT	9/9/1997	ND	ND	17	130	62	33	9	38	ND	ND	ND	5000	289
	12/18/1997	ND	ND	9	62	26	16	4	18	ND	ND	ND	43	135
DUPE	12/18/1997	ND	ND	8	61	26	14	4	16	ND	ND	ND	33	129
	6/25/1998	ND	ND	ND	23	16	17	ND	16	ND	ND	ND	51	72
DUPE	6/25/1998	ND	ND	ND	23	16	17	ND	15	ND	ND	ND	55	70
SPLIT	6/25/1998	ND	ND	ND	18	ND	19	ND	16	ND	ND	ND	ND	53
	10/13/1998	ND	ND	9	70	37	15	ND	21	ND	ND	ND	96	153
DUPE	10/13/1998	ND	ND	7	56	25	14	ND	17	ND	ND	ND	113	119
	12/4/1998	ND	ND	9	51	27	16	ND	17	ND	ND	ND	128	119
DUPE	12/4/1998	ND	ND	9	48	26	16	ND	16	ND	ND	ND	115	114
	6/16/1999	ND	ND	10	54	29	31	8	37	ND	ND	ND	820	168
DUPE	6/16/1999	ND	ND	6	37	18	27	8	35	ND	ND	ND	335	129
	9/30/1999	ND	ND	14	71	45	31	7	34	ND	ND	ND	ND	204
DUPE	9/30/1999	ND	ND	16	80	49	37	9	41	ND	ND	ND	ND	232
	12/22/1999	ND	ND	9	43	23	22	6	26	ND	ND	ND	2480	129
	3/15/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SPLIT	3/15/2000	ND	ND	1	9	5	4	1	4	0	ND	ND	250	24
	6/28/2000	ND	ND	7	36	19	13	ND	13	ND	ND	ND	92	0
SPLIT	6/28/2000	ND	0	5	37	19	17	4	19	2	ND	ND	38	0
	9/20/2000	ND	ND	ND	25	11	13	ND	15	ND	ND	ND	118	0
SPLIT	9/20/2000	ND	ND	ND	10	5	6	2	10	1	ND	ND	23	34
	12/20/2000	ND	ND	ND	8	6	7	ND	8	ND	ND	ND	87	28
SPLIT	12/20/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	4	0
	3/15/2001	ND	ND	ND	8	7	6	ND	6	ND	ND	ND	ND	0
SPLIT	3/15/2001	ND	ND	ND	17	8	9	ND	8	ND	ND	ND	3	0
m. malf.	8/23/2001	ND	ND	5	20	8	13	ND	12	ND	ND	ND	186	58
SPLIT	8/23/2001	ND	ND	5	22	8	18	ND	ND	1	ND	ND	450	54

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**Historic Groundwater Chemical Data Summary (Through 9/09)**  
**S-K N. Amityville, NY**

Well ID	TOC av. Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl-benzene (ug/l)	Xylenes (ug/l)	Chloro-benzene (ug/l)	1,2-DCB (ug/l)	1,3-DCB (ug/l)	1,4-DCB (ug/l)	1,2-DCE (ug/l)	1,1,1-TCA (ug/l)	trans -1,2-DCE (ug/l)	Mineral Spirits (ug/l)	Total VOCs (ug/l)
GW STND		1	5	5	5	5	3	3	3	5	5	5	50	
SPLIT	11/6/2001	ND	ND	7	35	15	25	ND	24	ND	ND	ND	100	106
	11/6/2001	ND	ND	5	27	11	20	ND	18	ND	ND	ND	110	81
	2/5/2002	ND	ND	ND	120	ND	98	ND	92	ND	ND	ND	120000	310
SPLIT	2/5/2002	ND	ND	ND	170	ND	160	ND	160	ND	ND	ND	140000	490
	4/16/2002	ND	ND	ND	53	ND	68	ND	57	ND	ND	ND	360000	178
	4/17/2002	ND	ND	ND	63	ND	77	ND	66	ND	ND	ND	490000	206
DUPE	10/11/2002	ND	ND	5	17	ND	20	4	18	ND	ND	ND	130	64
	10/11/2002	ND	ND	5	19	5	22	4	21	ND	ND	ND	880	76
	1/23/2003	ND	ND	ND	10	ND	15	ND	13	ND	ND	ND	340	38
DUPE	1/23/2003	ND	ND	ND	8	ND	14	ND	12	ND	ND	ND	800	34
	4/22/2003	ND	ND	ND	11	ND	20	4	18	ND	ND	ND	310	53
	4/22/2003	ND	ND	ND	6	ND	19	3	17	ND	ND	ND	240	45
DUPE	7/22/2003	ND	ND	ND	15	ND	27	5	22	ND	ND	ND	ND	69
	7/22/2003	ND	ND	ND	12	ND	21	4	18	ND	ND	ND	ND	55
	12/9/2003	ND	ND	5	22	13	33	9	40	ND	ND	ND	560	122
DUPE	12/9/2003	ND	ND	5	22	14	34	9	42	ND	ND	ND	710	126
	3/25/2004 *	ND	ND	ND	19	8	44	9	41	ND	ND	ND	490	121
	3/25/2004 *	ND	ND	ND	18	9	42	9	43	ND	ND	ND	ND	121
DUPE	6/29/2004	ND	ND	ND	ND	ND	8	ND	9	ND	ND	ND	510	17
	6/29/2004	ND	ND	ND	5	ND	13	ND	14	ND	ND	ND	ND	32
	10/4/2004	ND	ND	ND	ND	6	5	ND	8	ND	ND	ND	ND	19
DUPE	10/4/2004	ND	ND	ND	5	10	10	3	14	ND	ND	ND	ND	42
	12/28/2004	ND	ND	ND	6	11	11	3	16	ND	ND	ND	320	47
	3/24/2005	ND	ND	ND	ND	ND	ND	ND	6	ND	ND	ND	440	6
DUPE	7/6/2005	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	56	9
	7/6/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/20/2005	ND	ND	ND	ND	4	9	3	13				180	29
DUPE	12/13/2005	ND	ND	ND	8	10	17	6	32	ND	ND	ND	1400	73
	3/15/2006	ND	ND	ND	6	9	26	5	26	ND	ND	ND	2600	72
	6/22/2006	ND	ND	ND	6	9	24	9	29	ND	ND	ND	3300	77
DUPE	9/26/2006	ND	ND	ND	ND	ND	15	3	15	ND	ND	ND	3100	33
	12/19/2006	ND	ND	ND	7	ND	23	4	20	ND	ND	ND	2500	54
	12/19/2006	ND	ND	ND	5	ND	17	3	16	ND	ND	ND	2700	41
DUPE	3/27/2007	ND	ND	ND	ND	ND	12	ND	12	ND	ND	ND	1600	24
	3/27/2007	ND	ND	ND	ND	ND	13	ND	13	ND	ND	ND	1400	26
	6/26/2007	ND	ND	ND	ND	ND	10	ND	12	ND	ND	ND	880	22
DUPE	6/26/2007	ND	ND	ND	ND	ND	8	ND	9	ND	ND	ND	1400	17
	9/20/2007	ND	ND	ND	5	ND	18	5	20	ND	ND	ND	2400	48
	9/20/2007	ND	ND	ND	7	ND	24	5	24	ND	ND	ND	3000	60
Injection	10/16/2007	ND	ND	ND	ND	ND	ND	ND	4	ND	ND	ND	200	4

**Table 2**  
**Historic Groundwater Chemical Data Summary (Through 9/09)**  
**S-K N. Amityville, NY**

[illegible]

**Table 2**  
**Historic Groundwater Chemical Data Summary (Through 9/09)**  
**S-K N. Amityville, NY**

Well ID	TOC av.	Benzene	Toluene	Ethyl-benzene	Xylenes	Chloro-benzene	1,2-DCB	1,3-DCB	1,4-DCB	1,2-DCE	1,1,1-TCA	trans -1,2-DCE	Mineral Spirits	Total VOCs
GW STND	Date	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
Dupl	2/5/2002													
	4/16/2002													
	10/11/2002													
	1/23/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	4/22/2003	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/22/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/9/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	4/22/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	6/29/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	10/4/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/28/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7
	3/24/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/24/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	7/6/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/20/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/13/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/15/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	6/22/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/26/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/19/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/27/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	6/26/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/20/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/20/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/27/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	6/19/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/25/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/18/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
3/12/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	
6/17/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	
9/22/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	
GT-3	3/14/1994	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		NS	0
SPLIT	2/9/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	0
	5/28/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	0
SPLIT	8/22/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	0
	8/22/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	0
	12/2/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	0
	12/2/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	0
SPLIT	2/27/1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	0
	5/28/1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0



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**Historic Groundwater Chemical Data Summary (Through 9/09)**  
**S-K N. Amityville, NY**

Well ID	Date	TOC av.														Total VOCs (ug/l)
		Benzene (ug/l)	Toluene (ug/l)	Ethyl-benzene (ug/l)	Xylenes (ug/l)	Chloro-benzene (ug/l)	1,2-DCB (ug/l)	1,3-DCB (ug/l)	1,4-DCB (ug/l)	1,2-DCE (ug/l)	1,1,1-TCA (ug/l)	trans -1,2-DCE (ug/l)	Mineral Spirits (ug/l)			
GW STND		1	5	5	5	5	3	3	3	5	5	5	50			
SPLIT	9/9/1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	12/18/1997	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	6/25/1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	10/13/1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	10/13/1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	12/4/1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
SPLIT	6/16/1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	6/16/1999												1	0		
SPLIT	9/30/1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	9/30/1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
m. malif.	12/22/1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	3/15/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	6/28/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	9/20/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	12/20/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	3/15/2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	8/23/2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	11/6/2001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	2/5/2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	4/16/2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	10/11/2002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	1/23/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	170	0		
	2/27/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	2/27/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	4/22/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
	DUPE	7/22/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	
12/9/2003		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
4/22/2004		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
6/29/2004		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
10/4/2004		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
12/28/2004		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
3/24/2005		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
7/6/2005		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
12/13/2005		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
3/15/2006		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
6/22/2006		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
9/26/2006		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
12/19/2006		ND	ND	ND	ND	ND	8	ND	ND	ND	ND	ND	ND	8		
3/27/2007		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		
6/26/2007		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0		

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**S-K N. Amityville, NY**

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**Historic Groundwater Chemical Data Summary (Through 9/09)**  
**S-K N. Amityville, NY**

TOC av.		Benzene	Toluene	Ethyl- benzene	Xylenes	Chloro- benzene	1,2- DCB	1,3- DCB	1,4- DCB	1,2- DCE	1,1,1- TCA	trans -1,2- DCE	Mineral Spirits	Total VOCs
Well ID	Date	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
GW STND		1	5	5	5	5	3	3	3	5	5	5	50	
	10/4/2004													
	12/28/2004													
	3/24/2005													
	9/20/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/13/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/15/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/22/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/26/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/19/2006	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/26/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/20/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/20/2007	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/27/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/19/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/25/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	12/18/2008	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3/12/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
6/17/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
9/22/2009	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
GT-5	3/14/1994	ND	ND	ND	ND	ND	ND	ND	ND	27	ND		NS	27
SPLIT	2/9/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	0
	5/28/1996	ND	ND	ND	ND	ND	ND	ND	ND	18	ND		ND	18
DUPE	5/28/1996	ND	ND	ND	ND	ND	ND	ND	ND	27	ND		ND	27
	8/22/1996	ND	ND	ND	ND	ND	ND	ND	ND	83	ND		ND	83
DUPE	8/22/1996	ND	ND	ND	ND	ND	ND	ND	ND	112	ND	ND	ND	112
	12/2/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND	0
	12/2/1996	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	2/27/1997	ND	ND	ND	ND	ND	ND	ND	ND	33	ND	33	ND	33
	2/27/1997	ND	ND	ND	ND	ND	ND	ND	ND	28	ND	28	ND	28
	5/28/1997	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	11	ND	11
	9/9/1997	ND	ND	ND	ND	ND	ND	ND	ND	38	ND	38	ND	38
	12/18/1997	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	2
	6/25/1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	10/13/1998	ND	ND	ND	ND	ND	8	ND	ND	5	ND	5	ND	13
DUPE	12/4/1998	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	6/16/1999	ND	ND	ND	ND	ND	ND	ND	ND	15	ND	ND	ND	15
	9/30/1999	ND	ND	5	ND	17	13	ND	ND	13	ND	ND	ND	49
	12/22/1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/22/1999	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0

**Table 2**  
**Historic Groundwater Chemical Data Summary (Through 9/09)**  
**S-K N. Amityville, NY**

[illegible]

Well ID	Date	TOC	Benzene	Toluene	Ethyl- benzene	Xylenes	Chloro- benzene	1,2- DCB	1,3- DCB	1,4- DCB	1,2- DCE	1,1,1- TCA	trans -1,2- DCE	Mineral Spirits	Total VOCs
		av.	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
GW STND			1	5	5	5	5	3	3	3	5	5	5	50	
	9/25/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/18/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/12/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	6/17/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/22/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
DW-1	7/22/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
DUPE	12/9/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/25/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	6/29/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	10/4/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/28/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/24/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	7/6/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/20/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	370	0
	12/13/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/13/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/15/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	6/22/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/26/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/19/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/27/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	6/26/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/20/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/20/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/27/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	6/19/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
9/25/2008	dry - N/S					DRY									
12/18/2008	Dry - Soil sample and duplicate collected. ND for all parameters														
3/12/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
6/17/2009	Dry - Soil sample & duplicate collected. ND for all parameters														
9/22/2009	Dry - Soil sample & duplicate collected. ND for all parameters														
VE-5	12/28/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/24/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	7/6/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/20/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/13/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/15/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	6/22/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/26/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/19/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0

**Table 2**  
**Historic Groundwater Chemical Data Summary (Through 9/09)**  
**S-K N. Amityville, NY**

Well ID	TOC av. Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl-benzene (ug/l)	Xylenes (ug/l)	Chloro-benzene (ug/l)	1,2-DCB (ug/l)	1,3-DCB (ug/l)	1,4-DCB (ug/l)	1,2-DCE (ug/l)	1,1,1-TCA (ug/l)	trans -1,2-DCE (ug/l)	Mineral Spirits (ug/l)	Total VOCs (ug/l)
GW STND		1	5	5	5	5	3	3	3	5	5	5	50	
	3/27/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	6/26/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/20/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/20/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/27/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	60	0
	6/19/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/25/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	12/18/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	3/12/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	6/17/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
	9/22/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0
VE-1	3/30/2005	ND	ND	ND	ND	ND		ND	64	ND	ND	ND	2900	164
	7/6/2005	ND	ND	ND	5	ND	41	7	27	ND	ND	ND	5600	80
dry	9/20/2005													
	12/13/2005	ND	ND	ND	18	ND	97	72	71	ND	ND	ND	24000	258
	3/15/2006	ND	ND	ND	19J1M	ND	98J1M	83J1M	83J1M	ND	ND	6-cis 1,2 DCE	39000	289
	6/22/2006	ND	ND	ND	9	ND	57	ND	61	ND	ND	ND	17000	127
	9/26/2006	ND	ND	ND	ND	ND	18	8	26	ND	ND	ND	8600	52
	dup	ND	ND	ND	ND	ND	21	5	20	ND	ND	ND	3900	46
	12/19/2006	ND	ND	ND	ND	ND	37	12	45	ND	ND	ND	27000	94
	3/27/2007	ND	ND	ND	ND	ND	21	9	31	ND	ND	ND	34000	61
	6/26/2007	ND	ND	ND	ND	ND	27	13	40	ND	ND	ND	30000	80
	9/20/2007	ND	ND	ND	ND	ND	6	4	12	ND	ND	ND	9500	22
	12/20/2007	ND	ND	ND	ND	ND	9	7	19	ND	ND	ND	33000	35
	3/27/2008	ND	ND	ND	ND	ND	9	7	18	ND	ND	ND	430	78 <sup>1</sup>
	6/19/2008	ND	ND	ND	ND	ND	6	5	12	ND	ND	ND	21000	23
	9/25/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23000	0
	12/18/2008	ND	ND	ND	ND	ND	ND	ND	7.2	ND	ND	ND	15000	20.2
	3/12/2009	ND	ND	ND	ND	ND	ND	ND	3.9	ND	ND	ND	8000	3.9
	Note: 13 ppb of isopropylbenzene was also detected. This parameter total is included in the Total VOCs column.													
	6/17/2009	ND	ND	ND	ND	ND	ND	ND	6.0	ND	ND	ND	23000	6
	9/22/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8400	0

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**Table 2**  
**Historic Groundwater Chemical Data Summary (Through 9/09)**  
**S-K N. Amityville, NY**

Well ID	TOC av. Date	Benzene (ug/l)	Toluene (ug/l)	Ethyl-benzene (ug/l)	Xylenes (ug/l)	Chloro-benzene (ug/l)	1,2-DCB (ug/l)	1,3-DCB (ug/l)	1,4-DCB (ug/l)	1,2-DCE (ug/l)	1,1,1-TCA (ug/l)	trans -1,2-DCE (ug/l)	Mineral Spirits (ug/l)	Total VOCs (ug/l)
GW STND		1	5	5	5	5	3	3	3	5	5	5	50	

**Key**

Notes	Target Compound Abbreviations
BDL = Not detected above the method detection limit	1,2-DCB = 1,2-Dichlorobenzene
ND = Not Detected (reported in micrograms per liter (ug/l))	1,3-DCB = 1,3-Dichlorobenzene
NS = Not Sampled	1,4-DCB = 1,4-Dichlorobenzene
NA = Not Applicable	1,2-DCE = 1,2-Dichloroethene
TOC = Top of Casing (measured in feet above MSL)	1,1,1-TCA = 1,1,1-Trichloroethane
DO = Dissolved Oxygen (reported in milligrams per liter (mg/l))	
J1M = Lab estimated concentration	
Number that is in <b>BOLD</b> exceeds the New York State Class GA Groundwater	Trans-1,2-DCE = Trans-1,2-Dichloroethene
GW Standards for Class GA groundwater (NYSDEC TOGS 1.1.1, 10/22/93, Rev. 6/98)	

**Notes:**

1. Tetrachloroethane was detected at a concentration of 5.7 and 6.3 ug/L in sample GT-1 and X-2, respectively.

**Table 3**  
**Groundwater Monitoring Results Summary - Test America, Inc. Start**  
**Safety-Kleen Systems, Inc. - Corrective Action Program**  
**N. Amityville, New York Facility**

(Recorded At/Above the T.O.G.S. 1.1.1 Standards or Project-Specific Reporting Limits)  
(See Laboratory Report for all Compounds Detected Above the Method Detection Limit)  
(Project Laboratory as of 12/2009 - Test America, Inc.)

Monitoring Location	Sample Date	Detected Compound	Acetone	Benzene	Toluene	Ethyl- benzene	Xylenes	PCE	Chloro- benzene	1,2- DCB	1,3- DCB	1,4- DCB	1,2- DCE	1,1,1- TCA	trans -1,2- DCE	Mineral Spirit RO	Total VOCs	
		Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	
		TOGS-STD->	50	1	5	5	5	5	5	3	3	3	5	5	5	50	n/a	
GT-1	12/30/2009	Sample															1,300	
		Duplicate (X-1)															1,300	
	2/2/2010	Sample															1,000	
		Duplicate (X-1)															1,100	
	3/24/2010	Sample										3.5 & 4.1					6,400	3.5 & 4.1
		Duplicate (X-1)										3.5 & 4.2					4,500	3.5 & 4.2
	6/22/2010	Sample															3,000	
		Duplicate (X-1)															2,400	
	9/22/2010	Sample								4.9		10.0					18,000	14.9
		Duplicate (X-1)								4.9		11.0					16,000	15.9
	12/15/2010	Sample								9.1	5.2	21.0					12,000	35.3
		Duplicate (X-1)								9.1	5.1	20.0					39,000	34.2
	3/24/2011	Sample								6.8	4.0	15.0					18,000	25.8
		Duplicate (X-1)								6.9	4.1	15.0					24,000	26
	6/16/2011	Sample										6.5					8,500	6.5
		Duplicate (X-1)										7.2					11,000	7.2
	9/15/2011	Sample										5.5					12,000	5.5
		Duplicate (X-1)																
	12/16/2011	Sample										5.6					15,000	5.6
		Duplicate (X-1)										4.0					7,400	4.0
	3/14/2012	Sample										6.4					16,000	6.4
		Duplicate (X-1)										6.1					14,000	6.1
nfo Only H.T.E	6/20/2012											4.0				15,000	4.0	
nfo Only H.T.E		Duplicate (X-1)										4.0				12,000	4.0	
	8/28/2012											4.5				9,200	4.5	
		Duplicate (X-1)										4.8				10,000	4.8	
	10/25/2012									4.7	4.2	13.0				23,000	21.9	
		Duplicate								4.8	4.5	13.0				21,000	22.3	
	12/20/2012									4.0	3.6	11.0				24,000	18.6	
		Duplicate								3.9	3.5	11.0				32,000	18.4	
	3/14/2013											3.6				22,000	3.6	
		Duplicate										3.8				21,000	3.8	
	6/20/2013															16,000	0.0	
		Duplicate														15,000	0.0	
	9/24/2013											4.0				41,000	4.0	
		Duplicate										4.1				42,000	4.1	
	12/18/2013															5,700	0.0	
		Duplicate														5,100	0.0	
	GT-2	12/30/2009																
		2/2/2010															67	
3/24/2010																		
6/22/2010																		
9/22/2010																		
12/15/2010																		
3/24/2011																		
6/16/2011																		
9/15/2011																		
12/16/2011																		
3/14/2012																		
nfo Only H.T.E		6/20/2012																
8/28/2012																		
10/25/2012																		
12/20/2012																		
3/14/2013																		
6/20/2013																		
9/24/2013																		
12/18/2013	84																	

Monitoring Location	Sample Date	Detected Compound	Acetone	Benzene	Toluene	Ethylbenzene	Xylenes	PCE	Chlorobenzene	1,2-DCB	1,3-DCB	1,4-DCB	1,2-DCE	1,1,1-TCA	trans-1,2-DCE	Mineral Spirit RO	Total VOCs
		Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
		TOGS-STD->	50	1	5	5	5	5	5	3	3	3	5	5	5	50	n/a
GT-3	12/30/2009																
	2/2/2010																
	3/24/2010																
	6/22/2010																
	9/22/2010																
	12/15/2010																
	3/24/2011																
	6/16/2011																
	9/15/2011																
	12/16/2011																
	3/14/2012																
	Info Only H.T.E	6/20/2012															
	8/28/2012																
	10/25/2012																
	12/20/2012																
	3/14/2013																
	6/20/2013																
	9/24/2013															120	
	12/18/2013															81	
GT-4	12/30/2009	N/S															
	2/2/2010	N/S															
	3/24/2010	N/S															
	6/22/2010	N/S															
	9/22/2010	N/S															
	12/15/2010	N/S															
	3/24/2011	N/S															
	6/16/2011	N/S															
	9/15/2011	N/S															
	12/16/2011	N/S															
	3/14/2012	N/S															
	Info Only H.T.E	6/20/2012	N/S														
	8/28/2012	N/S															
	10/25/2012	N/S															
	12/20/2012	N/S															
	3/14/2013	N/S															
	6/20/2013	N/S															
	9/24/2013	N/S															
	12/18/2013	N/S															

Monitoring Location	Sample Date	Detected Compound	Acetone	Benzene	Toluene	Ethyl-benzene	Xylenes	PCE	Chloro-benzene	1,2-DCB	1,3-DCB	1,4-DCB	1,2-DCE	1,1,1-TCA	trans -1,2-DCE	Mineral Spirit RO	Total VOCs
		Units	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)	(ug/l)
		TOGS-STD->	50	1	5	5	5	5	5	3	3	3	5	5	5	50	n/a
GT-5	12/30/2009																
	2/2/2010																
	3/24/2010																
	6/22/2010																
	9/22/2010																
	12/15/2010																
	3/24/2011																
	6/16/2011																
	9/15/2011																
	12/16/2011																
	3/14/2012																
	6/20/2012																
	8/28/2012																
	10/25/2012																
	12/20/2012																
	3/14/2013																
	6/20/2013															570	
	9/24/2013																
	9/24/2013	Duplicate															
	12/18/2013																
VE-1	12/30/2009															23,000	
	2/2/2010															43,000	
	3/24/2010															5,400	
	6/22/2010															8,100	
	9/22/2010	Dry															
	12/15/2010	Dry															
	3/24/2011															8,300	
	6/16/2011															13,000	
	9/15/2011															680	
	12/16/2011															10,000	
	3/14/2012															2,600	
	6/20/2012															2,400	
	8/28/2012																
	10/25/2012															20,000	
	12/20/2012															12,000	
	3/14/2013															9,900	
	6/20/2013															22,000	
	9/24/2013															42,000	
	12/18/2013															44,000	
VE-1R	12/30/2009																
	2/2/2010																
	3/24/2010																
	6/22/2010																
	9/22/2010																
	12/15/2010																
	3/24/2011																
	6/16/2011																
	9/15/2011																
	12/16/2011																
	3/14/2012																
	6/20/2012																
	8/28/2012																
	10/25/2012																
	12/20/2012																
	3/14/2013																
	6/20/2013																
	9/24/2013																
	12/18/2013																

Monitoring Location	Sample Date	Detected Compound Units TOGS-STD->	Acetone (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Xylenes (ug/l)	PCE (ug/l)	Chloro- benzene (ug/l)	1,2- DCB (ug/l)	1,3- DCB (ug/l)	1,4- DCB (ug/l)	1,2- DCE (ug/l)	1,1,1- TCA (ug/l)	trans -1,2- DCE (ug/l)	Mineral Spirit RO (ug/l)	Total VOCs (ug/l)
			50	1	5	5	5	5	5	3	3	3	5	5	5	50	n/a
VE-5	12/30/2009															190	
	2/2/2010															390	
	3/24/2010																
	6/22/2010																
	9/22/2010																
	12/15/2010																
	3/24/2011																
	6/16/2011																
	9/15/2011																
	12/16/2011																
	3/14/2012																
	6/20/2012																
	8/28/2012																
	10/25/2012																
	3/14/2013																
	6/20/2013																
	9/24/2013																
	12/18/2013																
VP-A	12/30/2009	Not Accessible															
	2/2/2010															99	
	3/24/2010																
	6/22/2010																
	9/22/2010																
	12/15/2010																
	3/24/2011																
	6/16/2011																
	9/15/2011																
	12/16/2011																
	3/14/2012																
	6/20/2012																
	8/28/2012																
	10/25/2012																
	3/14/2013																
	6/20/2013																
	9/24/2013															100	
	12/18/2013															110	
VP-B	12/30/2009															58	
	2/2/2010															66	
	3/24/2010		130 & 110													120	130 & 110
	6/22/2010																
	9/22/2010																
	12/15/2010																
	3/24/2011																
	6/16/2011																
	9/15/2011																
	12/16/2011																
	3/14/2012																
	6/20/2012																
	8/28/2012																
	10/25/2012																
	3/14/2013																
	6/20/2013																
	9/24/2013															100	
	12/18/2013															93	

Monitoring Location	Sample Date	Detected Compound Units	Acetone (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethyl-benzene (ug/l)	Xylenes (ug/l)	PCE (ug/l)	Chloro-benzene (ug/l)	1,2-DCB (ug/l)	1,3-DCB (ug/l)	1,4-DCB (ug/l)	1,2-DCE (ug/l)	1,1,1-TCA (ug/l)	trans -1,2-DCE (ug/l)	Mineral Spirit RO (ug/l)	Total VOCs (ug/l)
		TOGS-STD->	50	1	5	5	5	5	5	3	3	3	5	5	5	50	n/a
DW-1 SOIL	12/30/2009	Sample															
		Duplicate															
ug/kg	2/2/2010	Sample															
		Duplicate															
	3/24/2010	Sample															
		Duplicate															
	6/22/2010	Sample															
		Duplicate															
	9/22/2010	Sample															
		Duplicate															
	12/15/2010	Sample															
		Duplicate															
	9/15/2011	Sample															
		Duplicate															
	12/16/2011	Sample															
	3/14/2012	Sample															
		Duplicate															
	6/20/2012	Sample															
		Duplicate															
	8/28/2012																
	10/25/2012															14,000	
		Soil Standard is 10,000 ug/kg															
	12/20/2012	Sample															
		Duplicate															
		Methylene Chloride: 59					STD: 50										
	3/21/2013	Sample														23,000	
		Duplicate														19,000	
	6/20/2013	Sample														9,600	
		Duplicate														13,000	
	9/24/2013	Sample															
		Duplicate															
	12/18/2013	Sample														20,000	
		Duplicate														10,000	
DW-1 WTR	12/30/2009	No standing water															
	2/2/2010	No standing water															
	3/24/2010	sampled															
	6/22/2010	No standing water															
	9/22/2010	No standing water															
	12/15/2010	No standing water															
	3/24/2011	sampled															
	6/16/2011	sampled															
	9/15/2011	No standing water															
	12/16/2011	No standing water															
	3/14/2012	No standing water															
	6/20/2012	No standing water															
	8/28/2012	No standing water															
	10/25/2012	No standing water															
	12/20/2012	No standing water															
	3/21/2013	No standing water															
	6/20/2013	No standing water															
	9/24/2013	No standing water															
	12/18/2013	No standing water															

## **ATTACHMENT 4**

# **LABORATORY ANALYTICAL REPORT**

COMPACT DISK DISTRIBUTION

CC LIST Hard Copy Recipients

(Executive Summary Attached Herein)

## ANALYTICAL REPORT

Job Number: 460-68628-1

Job Description: 2013 Safety-Kleen Amityville

For:

BE Enviro Metrics  
1188 Hillside Drive  
Cortland, NY 3045

Attention: Joseph Basile, Jr., MSc.

*Melissa Haas*

Approved for release.  
Melissa Haas  
Project Manager I  
1/16/2014 11:56 AM

---

Melissa Haas, Project Manager I  
777 New Durham Road, Edison, NJ, 08817  
(203)944-1310  
melissa.haas@testamericainc.com  
01/16/2014  
Revision: 1

The test results in this report meet all NELAP requirements unless specified within the case narrative. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this report should be directed to the TestAmerica Edison Project Manager.

TestAmerica Edison Certifications and Approvals: Connecticut: CTDOH #PH-0200, New Jersey: NJDEP (NELAP) #12028, New York: NYDOH (NELAP) #11452, NYDOH (ELAP) #11452, Pennsylvania: PADEP (NELAP) 68-00522 and Rhode Island: RIDOH LA000132





Job Number: 460-68628-1

Job Description: 2013 Safety-Kleen Amityville

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed within the body of this report. Release of the data contained in this sample data package and in the electronic data deliverable has been authorized by the Laboratory Manager or his/her designee, as verified by the following signature.

A handwritten signature in dark ink that reads "Melissa Haas". The signature is written in a cursive, flowing style. Below the signature is a solid horizontal line.

Approved for release.  
Melissa Haas  
Project Manager I  
1/16/2014 11:56 AM

Melissa Haas

#### Report Revision

The case narrative for this data package was revised to provide more detailed explanation of QC outliers.

#### Comments

No additional comments.

#### Receipt

The samples were received on 12/18/2013 5:50 PM and 12/19/2013 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.1° C and 2.1° C.

#### Except:

The Chain-of-Custody (COC) was not properly filled out. No tests were marked on COC for DW-1 and DW-1 Dup. The client was contacted and confirmed that these samples should be analyzed for 8260 VOC and mineral spirits. In addition, 8015 DRO and GRO analysis was indicated on the COC; however, 8260 VOC and mineral spirits are the required analyses.

Technical and Operational Guidance Series subpart 1.1.1 (The New York State Ambient Water Quality Standards and Guidance Values) references a class GA standard of 0.04 ug/L for 1,2-dibromo-3-Chloropropane and 1,2,3-Trichloropropane, and 0.2 ug/L for trans-1,3-Dichloropropene. The laboratory is unable to meet this standard by reporting to their established reporting limit (RL) or method detection limit (MDL). Sample results are evaluated to the MDL, which is the lowest level the instrumentation has been able to detect, which is 0.4 ug/L for 1,2-Dibromo-3-Chloropropane, 0.42 ug/L for 1,2,3-Trichloropropane, and 0.24 for trans-1,3-Dichloropropene.

The Edison lab does not hold NY certification for the following analytes via method 8260 for water or soil: Ethyl Methacrylate, Iodomethane and Methacrylonitrile.

The following analytes are included in this report but certification is not offered by the governing authority: Mineral Spirits by SW846 8260B.

#### GC/MS VOA

Method 8260C: Method 8260C establishes more stringent CCV criteria than Method 8260B. The following excursions were evaluated and determined to have no impact to sample results, therefore data have been qualified and reported. Analytes with a positive drift in the CCV would generate a positive bias in samples, however all samples were non-detect therefore no positive bias is indicated. A few analytes had a slight negative drift, however since the data are reported to the MDL and there was no chromatographic response below the RL for any of these compounds, there is no indication of bias.

CCV 200766: Bromoform, Acetonitrile, Bromomethane.

CCV 200895: Acetone, Acetonitrile, and trans-1,4-Dichloro-2-butene.

CCV 200889: Acetone, Iodomethane, Chloroethane, Tetrachloroethene, 2-Butanone, Acetonitrile, Vinyl Acetate.

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and %RPD for batch 200766 could not be calculated for 2-Chloroethyl vinyl ether due to sample preservation. The associated laboratory control sample (LCS) recovery met acceptance criteria.

Method 8260C: The laboratory control sample (LCS) for batch 200889 recovered outside control limits for the following analytes: Tetrachloroethene, Acetonitrile and 2-Butanone. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, there is no impact to the sample results and data have been reported.

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 200889 were outside control limits for Acetonitrile (high) and Vinyl Acetate (low). The associated laboratory control sample (LCS) recovery was acceptable for Vinyl Acetate indicating possible matrix effects in the MS/MSD. The LCS was biased high for Acetonitrile however all sample results were non-detect and were not impacted therefore data have been reported.

Method 8260C: Internal standard (ISTD) response for 1,4-Dioxane-d8 for the following sample was outside acceptance criteria: DW-1 DUP (460-68628-2). This ISTD does not correspond to any of the requested target compounds; therefore, the data have been reported.

No other analytical or quality issues were noted.

#### GC MS VOA

Method 8260B (Mineral Spirits): The matrix spike / matrix spike duplicate / (MS/MSD/) recoveries for batch 200727 were both outside control limits and biased low. Sample matrix interference is suspected because the MS/MSD RPD and the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) recoveries were within acceptance limits.

Method 8260B (Mineral Spirits): The lab observed that the initial amount provided for the prep and analysis of sample DW-1 (2.20g) was significantly lower than the method required amount and significantly different from the sample amount provided for sample DW-1 DUP (3.79g). The lab observed that while both sample aliquots had roughly equal amounts of sand, sample DW-1 DUP contained significantly more small rocks/pebbles. Due to this weight difference there is a significant difference in the final calculated concentrations of Mineral Spirits Range Organics in the two samples. The raw, on-column concentrations of Mineral Spirits Range Organics in DW-1 and DW-1 DUP display much better agreement.

No other analytical or quality issues were noted.

**VOA Prep**

No analytical or quality issues were noted.

### **Project Specific Reporting Limits – Aqueous Samples**

For aqueous samples, please note that the reporting limits listed below may vary for each sample analyzed based on sample volume, and/or sample dilution. The aqueous laboratory reporting limits are based on the New York State Department of Environmental Conservation (NYSDEC) Technical & Operational Guidance Series (TOGS) section 1.1.1 class GA standards, and ASI's previously reported laboratory reporting limits where no TOGS class GA standard exists.

<b>Analyte</b>	<b>Aqueous Project Specific Reporting Limits</b>	<b>Units</b>
Acetone	50	ug/L
Acetonitrile	10	ug/L
Allyl chloride	5	ug/L
Benzene	1	ug/L
Benzyl chloride	10	ug/L
Bromodichloromethane	50	ug/L
Bromoform	5	ug/L
Bromomethane	5	ug/L
2-Butanone (MEK)	50	ug/L
Carbon disulfide	60	ug/L
Carbon tetrachloride	5	ug/L
Chlorobenzene	5	ug/L
Chloroethane	5	ug/L
2-Chloroethyl vinyl ether	20	ug/L
Chloroform	7	ug/L
Chloromethane	5	ug/L
cis-1,2-Dichloroethene	5	ug/L
cis-1,3-Dichloropropene	0.2	ug/L
Dibromochloromethane	50	ug/L
1,2-Dibromo-3-Chloropropane	0.04	ug/L
1,2-Dibromoethane	5	ug/L
Dibromomethane	5	ug/L
1,3-Dichlorobenzene	3	ug/L
1,4-Dichlorobenzene	3	ug/L
1,2-Dichlorobenzene	3	ug/L
Dichlorodifluoromethane	5	ug/L
1,1-Dichloroethane	5	ug/L
1,2-Dichloroethane	0.6	ug/L
1,1-Dichloroethene	5	ug/L
1,2-Dichloroethene, Total	2	ug/L
1,2-Dichloropropane	1	ug/L
Ethylbenzene	5	ug/L
Ethyl methacrylate	5	ug/L
2-Hexanone	50	ug/L
Iodomethane	5	ug/L
Isobutyl alcohol	250	ug/L
Methacrylonitrile	5	ug/L
Methylene Chloride	5	ug/L
Methyl methacrylate	50	ug/L
4-Methyl-2-pentanone (MIBK)	5	ug/L
m&p-Xylene	10	ug/L
o-Xylene	5	ug/L
Styrene	5	ug/L
1,1,1,2-Tetrachloroethane	5	ug/L
1,1,2,2-Tetrachloroethane	5	ug/L
Tetrachloroethene	5	ug/L
Toluene	5	ug/L
trans-1,4-Dichloro-2-butene	5	ug/L
trans-1,2-Dichloroethene	5	ug/L

Analyte	Aqueous Project Specific Reporting Limit	Units
<i>trans</i> -1,3-Dichloropropene	0.2	ug/L
1,1,1-Trichloroethane	5	ug/L
1,1,2-Trichloroethane	1	ug/L
Trichloroethene	5	ug/L
1,2,3-Trichloropropane	0.04	ug/L
Vinyl acetate	5	ug/L
Vinyl chloride	2	ug/L
Xylenes, Total	15	ug/L
Mineral Spirit Range Organics	50	ug/L

### **Project Specific Reporting Limits – Solid Samples**

For solid samples, please note that the reporting limits listed below will vary for each sample analyzed based on sample moisture content, sample volume, and/or sample dilution. The solid laboratory reporting limits are based on the New York State Department of Environmental Conservation (NYSDEC)

Subpart 375-6.8(a) Unrestricted Use Soil Cleanup Objectives and TestAmerica

Edison's laboratory reporting limits where no part 375 cleanup objectives exist.

<b>Analyte</b>	<b>Solid Project Specific Reporting Limits</b>	<b>Units</b>
Acetone	50	ug/Kg
Acetonitrile	50	ug/Kg
Allyl chloride	5	ug/Kg
Benzene	60	ug/Kg
Benzyl chloride	5	ug/Kg
Bromodichloromethane	5	ug/Kg
Bromoform	5	ug/Kg
Bromomethane	5	ug/Kg
2-Butanone (MEK)	120	ug/Kg
Carbon disulfide	5	ug/Kg
Carbon tetrachloride	760	ug/Kg
Chlorobenzene	1100	ug/Kg
Chloroethane	5	ug/Kg
2-Chloroethyl vinyl ether	5	ug/Kg
Chloroform	370	ug/Kg
Chloromethane	5	ug/Kg
cis-1,2-Dichloroethene	250	ug/Kg
cis-1,3-Dichloropropene	5	ug/Kg
Dibromochloromethane	5	ug/Kg
1,2-Dibromo-3-Chloropropane	10	ug/Kg
1,2-Dibromoethane	5	ug/Kg
Dibromomethane	5	ug/Kg
1,3-Dichlorobenzene	2400	ug/Kg
1,4-Dichlorobenzene	1800	ug/Kg
1,2-Dichlorobenzene	1100	ug/Kg
Dichlorodifluoromethane	5	ug/Kg
1,1-Dichloroethane	270	ug/Kg
1,2-Dichloroethane	20	ug/Kg
1,1-Dichloroethene	330	ug/Kg
1,2-Dichloroethene, Total	5	ug/Kg
1,2-Dichloropropane	5	ug/Kg
Ethylbenzene	1000	ug/Kg
Ethyl methacrylate	10	ug/Kg
2-Hexanone	10	ug/Kg
Iodomethane	10	ug/Kg
Isobutyl alcohol	150	ug/Kg
Methacrylonitrile	10	ug/Kg
Methylene Chloride	50	ug/Kg
Methyl methacrylate	10	ug/Kg
4-Methyl-2-pentanone (MIBK)	5	ug/Kg
m&p-Xylene	5	ug/Kg
o-Xylene	5	ug/Kg
Styrene	5	ug/Kg
1,1,1,2-Tetrachloroethane	5	ug/Kg
1,1,2,2-Tetrachloroethane	5	ug/Kg
Tetrachloroethene	1300	ug/Kg
Toluene	700	ug/Kg
trans-1,4-Dichloro-2-butene	10	ug/Kg
trans-1,2-Dichloroethene	190	ug/Kg

<b>Analyte</b>	<b>Solid Project Specific Reporting Limits</b>	<b>Units</b>
<i>trans</i> -1,3-Dichloropropene	5	ug/Kg
1,1,1-Trichloroethane	680	ug/Kg
1,1,2-Trichloroethane	5	ug/Kg
Trichloroethene	470	ug/Kg
1,2,3-Trichloropropane	5	ug/Kg
Vinyl acetate	20	ug/Kg
Vinyl chloride	5	ug/Kg
Xylenes, Total	260	ug/Kg
Mineral Spirit Range Organics	2500	ug/Kg

## SAMPLE SUMMARY

Client: BE Enviro Metrics

Job Number: 460-68628-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
460-68628-1	DW-1	Solid	12/18/2013 1230	12/19/2013 1020
460-68628-1MS	DW-1	Solid	12/18/2013 1230	12/19/2013 1020
460-68628-1MSD	DW-1	Solid	12/18/2013 1230	12/19/2013 1020
460-68628-2	DW-1 DUP	Solid	12/18/2013 1230	12/19/2013 1020
460-68628-3	GW Rinsate	Water	12/18/2013 0915	12/19/2013 1020
460-68628-4	Soil Rinsate	Water	12/18/2013 1215	12/19/2013 1020
460-68676-1	GT-1	Water	12/18/2013 0945	12/18/2013 1750
460-68676-2	GT-2	Water	12/18/2013 1030	12/18/2013 1750
460-68676-3	GT-3	Water	12/18/2013 0915	12/18/2013 1750
460-68676-4	GT-5	Water	12/18/2013 0800	12/18/2013 1750
460-68676-5	VP-A	Water	12/18/2013 1145	12/18/2013 1750
460-68676-6	VP-B	Water	12/18/2013 1100	12/18/2013 1750
460-68676-7	VE-1R	Water	12/18/2013 1230	12/18/2013 1750
460-68676-8	VE-5	Water	12/18/2013 0850	12/18/2013 1750
460-68676-9	Duplicate	Water	12/18/2013 1000	12/18/2013 1750
460-68676-10TB	Trip Blank	Water	12/18/2013 1230	12/18/2013 1750



## EXECUTIVE SUMMARY - Detections

Client: BE Enviro Metrics

Job Number: 460-68628-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>460-68628-1</b>	<b>DW-1</b>					
Methylene Chloride		2.8	J B	59	ug/Kg	8260C
1,2-Dichloropropane		0.81	J	5.9	ug/Kg	8260C
Chlorobenzene		0.31	J	1300	ug/Kg	8260C
Mineral Spirit Range Organics		20000		12000	ug/Kg	8260B
Percent Moisture		2.4		1.0	%	Moisture
Percent Solids		97.6		1.0	%	Moisture
<b>460-68628-2</b>	<b>DW-1 DUP</b>					
Methylene Chloride		1.9	J B	66	ug/Kg	8260C
1,2-Dichloropropane		0.74	J	6.6	ug/Kg	8260C
Chlorobenzene		0.28	J	1500	ug/Kg	8260C
Mineral Spirit Range Organics		10000		6800	ug/Kg	8260B
Percent Moisture		2.5		1.0	%	Moisture
Percent Solids		97.5		1.0	%	Moisture
<b>460-68628-3</b>	<b>GW RINSATE</b>					
Bromodichloromethane		0.94	J	50	ug/L	8260C
Chloroform		4.5	J	7.0	ug/L	8260C
Methylene Chloride		0.78	J	5.0	ug/L	8260C
<b>460-68628-4</b>	<b>SOIL RINSATE</b>					
Bromodichloromethane		0.96	J	50	ug/L	8260C
Chloroform		4.2	J	7.0	ug/L	8260C
Methylene Chloride		0.71	J	5.0	ug/L	8260C
<b>460-68676-1</b>	<b>GT-1</b>					
Acetone		14	J	50	ug/L	8260C
1,2-Dichlorobenzene		0.45	J	3.0	ug/L	8260C
1,3-Dichlorobenzene		1.0	J	3.0	ug/L	8260C
1,4-Dichlorobenzene		2.3	J	3.0	ug/L	8260C
Tetrachloroethene		0.19	J	5.0	ug/L	8260C
Mineral Spirit Range Organics		5700		1300	ug/L	8260B
<b>460-68676-2</b>	<b>GT-2</b>					
Acetone		84		50	ug/L	8260C
Tetrachloroethene		1.0	J	5.0	ug/L	8260C

## EXECUTIVE SUMMARY - Detections

Client: BE Enviro Metrics

Job Number: 460-68628-1

Lab Sample ID Analyte	Client Sample ID	Result	Qualifier	Reporting Limit	Units	Method
<b>460-68676-3</b>	<b>GT-3</b>					
Tetrachloroethene		0.21	J	5.0	ug/L	8260C
Mineral Spirit Range Organics		81		50	ug/L	8260B
<b>460-68676-4</b>	<b>GT-5</b>					
Tetrachloroethene		0.16	J	5.0	ug/L	8260C
<b>460-68676-5</b>	<b>VP-A</b>					
Tetrachloroethene		0.47	J	5.0	ug/L	8260C
Trichloroethene		0.12	J	5.0	ug/L	8260C
Mineral Spirit Range Organics		110		50	ug/L	8260B
<b>460-68676-6</b>	<b>VP-B</b>					
Tetrachloroethene		0.56	J	5.0	ug/L	8260C
Trichloroethene		0.10	J	5.0	ug/L	8260C
Mineral Spirit Range Organics		93		50	ug/L	8260B
<b>460-68676-7</b>	<b>VE-1R</b>					
Acetone		19	J	50	ug/L	8260C
Carbon disulfide		0.36	J	60	ug/L	8260C
Chloroethane		1.2	J	5.0	ug/L	8260C
2-Butanone (MEK)		2.5	J	50	ug/L	8260C
Mineral Spirit Range Organics		44000		2500	ug/L	8260B
<b>460-68676-8</b>	<b>VE-5</b>					
Tetrachloroethene		0.59	J	5.0	ug/L	8260C
<b>460-68676-9</b>	<b>DUPLICATE</b>					
Acetone		17	J	50	ug/L	8260C
1,2-Dichlorobenzene		0.47	J	3.0	ug/L	8260C
1,3-Dichlorobenzene		1.0	J	3.0	ug/L	8260C
1,4-Dichlorobenzene		2.3	J	3.0	ug/L	8260C
Tetrachloroethene		0.20	J	5.0	ug/L	8260C
Mineral Spirit Range Organics		5100		1300	ug/L	8260B
<b>460-68676-10TB</b>	<b>TRIP BLANK</b>					
Bromodichloromethane		0.82	J	50	ug/L	8260C
Chloroform		4.0	J	7.0	ug/L	8260C
Methylene Chloride		0.68	J	5.0	ug/L	8260C

## METHOD SUMMARY

Client: BE Enviro Metrics

Job Number: 460-68628-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Solid</b>			
Volatile Organic Compounds by GC/MS	TAL EDI	SW846 8260C	
Closed System Purge and Trap	TAL EDI		SW846 5035
8260B - Mineral Spirt Range Organics	TAL EDI	SW846 8260B	
Closed System Purge and Trap	TAL EDI		SW846 5035
Percent Moisture	TAL EDI	EPA Moisture	
<b>Matrix: Water</b>			
Volatile Organic Compounds by GC/MS	TAL EDI	SW846 8260C	
Purge and Trap	TAL EDI		SW846 5030C
8260B - Mineral Spirt Range Organics	TAL EDI	SW846 8260B	
Purge and Trap	TAL EDI		SW846 5030B

### Lab References:

TAL EDI = TestAmerica Edison

### Method References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.