

SPEONK SOLVENT PLUME
SITE MANAGEMENT
MONITORING REPORT
APRIL-JUNE 2018 SAMPLING EVENT

NYSDEC SITE NUMBER # 152185

MAY 17, 2019

Prepared for:



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1.0 INTRODUCTION

This site management monitoring report summarizes the field work associated with the groundwater sampling event conducted between April and June 2018 by Environmental Assessment & Remediations (EAR) for the New York State Department of Environmental Conservation (NYSDEC). This site was sampled every fifth quarter beginning in July 2014. No field work activities were conducted by EAR between January 2017 and March 2018.

Site management has been conducted following the December 2011 Site Characterization Report for the Speonk Solvent Plume (CDM). This report contains data from all four of the site management groundwater sampling events, conducted every fifth quarter, beginning in July 2014 and concluding in June 2018. The most recent event also included sampling for emerging contaminants, 1,4-dioxane and per- and polyfluoroalkyl substances (PFAS), in select wells. The next site management sampling event is scheduled to begin in April 2020. A site location map has been included as **Figure 1**.

Groundwater samples were collected by EAR from 127 discrete sampling points within the multilevel well monitoring network and one irrigation well located at The Garden Department (166 Old Country Road, Speonk) during the period of April 26 through June 1, 2018 to further develop the site conceptual model. A summary of EARs actions, findings and supporting figures are provided in this document.

1.1 BACKGROUND

In October 2013, the NYSDEC directed EAR to begin the implementation of the Speonk Solvent Plume Management Monitoring. Subsequent to the site walk on October 24, 2013, the following tasks were completed:

- In November 2013, one multi-level well (ML-5) was installed on the south side of Horse Shoe Lane.
- Between January and March 2014, MJ Engineering and Land Surveying, P.C of Clifton Park, New York surveyed 72 discrete sampling points to obtain data required to calculate groundwater hydraulic head and groundwater flow direction. In addition, 38 Suffolk County Water Authority fire hydrants were surveyed to incorporate wells added to the monitoring network in the future.
- Pressure transducers were installed in 17 monitoring wells in April 2014 to establish horizontal groundwater flow direction. The wells were selected based on screen elevation, well diameter, distance between wells and spatial distribution. The depth of each well ranges from approximately 20 feet BGS and 40 feet BGS. The pressure head data was compiled after download and processed to calculate groundwater elevations. Calculated groundwater elevations were then processed using a geostatistical method (Kriging) to estimate groundwater elevation values between locations and to determine groundwater flow direction. No extrapolation of data was conducted outside the domain of the pressure transducer locations. The groundwater flow for the western portion of the plume appears to be moving south-south west. The groundwater flow for the eastern portion of the plume appears to move south-south east.
- Once groundwater flow direction was established, three additional monitoring wells were installed (ML-1, ML-2 and ML-3) via hollow stem auger drilling in May 2014. Clay was observed on the hollow stem augers during the installation of ML-1 and ML-3.
- Following the installation of the multi-level wells, a groundwater sampling plan was developed, and the initial groundwater monitoring event was conducted in July 2014. Details of the well installation, site survey, the groundwater flow study and the initial groundwater sampling event were included in the Project Summary Letter Report submitted under a separate cover by EAR in November 2014.

- Groundwater samples were collected by EAR from 124 discrete sampling points during the period of October 5 through 21, 2015 to further develop the site conceptual model (EAR, April 2016, Site Management Monitoring Report Fall 2015 Sampling Event).
- Groundwater samples were collected by EAR from 123 discrete sampling points during the period of January 11 through February 6, 2017 to further develop the site conceptual model (EAR, May 2017, Site Management Monitoring Report January 2017 Sampling Event).

2.0 MONITORING WELL NETWORK

Multi-level wells provide permanent discrete sampling locations for the continued monitoring of the plume. Each multi-level well contains nine individual sampling points, or small diameter monitoring wells, at varying depths. Each individual well is constructed of schedule 40 PVC riser and a section of 0.020-inch slotted PVC screen. The diameter, depths, and screen intervals of each multi-level well vary with site conditions and locations. In addition to the four multi-level wells (35 discrete sampling points), 96 monitoring wells (sampling points) of varying sizes, depths and screen zones were previously installed as part of the site characterization. A site location map with well locations are included as **Figure 2**.

2.1 WATER LEVEL GAUGING

During the April 2018 groundwater sampling event, manual depth-to-water measurements were recorded over a 15-day period. Calculated groundwater elevations from wells ranging in depth from 20-40 feet BGS were then processed using a geostatistical method (Kriging) to estimate groundwater elevation values between locations and to determine groundwater flow direction.

Monitoring well gauging results are provided in **Table 1**. Groundwater elevation graphs were generated based on depth to water readings collected in April and May 2018 and depict vertical groundwater elevations for select monitoring wells. The graphs are attached as **Figure 3** through **Figure 6**. A visualization of the groundwater elevation contour lines, which represent the upper aquifer, is included as **Figure 7**.

2.2 GROUNDWATER SAMPLING EVENT

Groundwater samples were collected from 127 discrete sampling points within the multilevel well monitoring network and one irrigation well located at The Garden Department during the period of April 26 through June 1, 2018 to obtain groundwater quality data. Prior to sampling, all wells were gauged to determine the height of the water column and corresponding volume of standing water in the well. Groundwater field screening was conducted by EAR personnel using a water quality meter (YSI 556 or similar) and flow-through cell to determine stabilization. Using low flow techniques, each discrete sampling well was purged through the flow-through cell for at least one well volume prior to screening for temperature, pH, and specific conductivity. Dissolved oxygen concentrations and oxidation/reduction potential (ORP) readings were also recorded prior to sample collection.

Groundwater samples were collected according to EAR's standard procedures to prevent cross-contamination between the wells and to ensure sample integrity. Trip blank, field blank and equipment blank samples were collected and one matrix spike/matrix spike duplicate sample (MS/MSDS) were collected to evaluate integrity of sampling collection and determine if cross-contamination between samples occurred during storage and transportation. Blind duplicate samples were collected to confirm analytical reproducibility. Samples were submitted to TestAmerica Laboratories, Inc. of Edison, New Jersey (TestAmerica) for analysis of select volatile organic compounds (VOCs) via EPA Method 8260C. As directed by the NYSDEC, eight of samples collected from select sampling points (SP-5A, SP-22O, SP-44P, SP-48P, SP-50M, SP-66D, SP-81 and Garden Department irrigation well) were analyzed for PFAS compounds via EPA Method 537 and 1,4 Dioxane via EPA method 8270 SIMs. Sample containers and transport coolers were provided by the laboratory. PFAS free deionized water was provided by TestAmerica and utilized to decontaminate equipment between each sampling point analyzed for PFAS. Upon collection, samples were immediately placed in a cooler with ice to maintain a temperature of 4 degrees Celsius prior to delivery to the lab and/or courier. Chain-of-Custody forms were completed by groundwater sampling personnel and possession was maintained between sampling personnel and the laboratory.

Laboratory Data Consultants, Inc. of Carlsbad, California (LDC) completed a Data Usability Summary Review (DUSR) on all PFAS and 1,4 Dioxane analytical data received from TestAmerica. The groundwater sample analytical results were analyzed under the United States Environmental Protection Agency (USEPA) "Test Methods for the Evaluation of the

Solid Waste, USEPA SW-846, Third Edition, September 1986, with Revisions”, USEPA Region 2 Standard Operating Procedure for Semi volatile Data Validation SOP HW-35A, Revision 1: September 2016, USEPA Contract laboratory Program National Functional Guideline for Superfund Organic Methods Data Review; EPA 540-R-2017-002; January 2017 and the Standard Methods for the Examination of Water and Wastewater. LDC did not reject any data; however, qualifiers were added to select analytes. The qualifiers were incorporated in the summary of the groundwater analytical results included as **Table 3**. The completed DUSRs are included as **Appendix A**.

2.3 GROUNDWATER SAMPLING RESULTS

Analysis of the groundwater samples collected indicate the presence of 17 VOCs. Seven of the VOCs detected were reported in concentrations exceeding the respective TOGS 1.1.1 Class GA water quality standards and guidance value limits. Maximum reported concentrations for the seven VOC contaminants that were detected above standard and guidance values are summarized below:

Parameter	Maximum Observed Concentration (ug/L)	NYSDEC TOGS111 Class GA Standard/Guidance	Sampling Location
Carbon Tetrachloride	21	5	SP-48 (75’)
Tetrachloroethene	280	5	SP-50M (86’)
Trichloroethylene	50	5	SP-48 (75’)
Chloroform	290	7	SP-48 (75’)
1,1 Dichloroethene	15	5	SP-48 (75’)
1,1,1 Trichloroethane	17	5	SP-48 (75’)
1,2 Dichloroethane	2.5	0.6	SP-48 (75’)

Laboratory data indicates that 16 of the PFAS were detected above laboratory reporting limits but below United States Environmental Protection Agency (USEPA) Health Advisory Level of 70 nanograms/Liter (ng/L). Perfluorooctanoic acid (PFOA) was detected above the USEPA Health advisory level at a concentration of 129 ng/L. 1,4 Dioxane was detected in four of the samples collected at concentrations ranging from 0.32 ug/L to 4.2 ug/L.

Summaries of the groundwater analytical, field screening, relative percent difference data and historical concentrations are attached as **Table 2** through **Table 6**. Summaries of trip, field blank and equipment blank detections are included in **Appendix B**. A table comparing SCDHS well identifications with EAR well identifications is included as **Table 7**. Historical data tables and a figure with well locations provided by SCDHS and the NYSDEC are included as **Appendix C**.

Chemical distributions of carbon tetrachloride, tetrachloroethene, chloroform, trichloroethylene and total VOCs have been graphically depicted with a series of post maps (**Figure 8** through **Figure 23**) and cross section views (**Figure 24** through **Figure 33**), using the dataset accumulated from the April 2018 groundwater sampling event. The geospatial interpolation method applied to all data input files is kriging¹; this is one of the computational modules of the commercially available environmental visualization software (Mining Visualization Systems EVS/MVS, by C Tech Development Corporations) that EAR uses from pre-processed data input, to dataset calculations and output graphics. Kriging parameters and variograms may be issued upon request.

¹Kriging is a statistical based unbiased estimator for spatial variables which retains the observed data point values. The spatial variation is quantified by using weighted averages of neighboring samples to estimate the “unknown” values at a given location using a semi-variogram model. The semi-variogram provides a description of how spatial data is related (correlated) with distance by a calibrated mathematical function. The mathematical function is then used during the

kriging procedure to determine the interpolation weights and then all the “unknown” values. The limitation of kriging is that it requires a spatial semi-variogram model be specified which may be difficult with sparse data. The general rule for construction of a semi-variogram is that the number of data points should be greater than 30 in order to minimize errors with the calculated semi-variogram model parameters. As mentioned above, the attached figures represent a spatial distribution of the chemicals of concern. However, the limited data sets allow for uncertainties and the visualizations may not represent the actual extent of the plume.

TABLES

Table 1

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185



Groundwater Gauging Results

EAR Field Screening

		PT Download		PT Download		PT Download		PT Download		PT Download		GWS Round 1		PT Download		PT Download		PT Download		PT Removal		Gauging Event		Gauging Event		GWS Round 2		GWS Round 2		GWS Round 2		GWS Round 3		GWS Round 4	
		March 6-7 2014		March 14, 2014		April 1, 2014		April 10, 2014		April 14, 2014		July 8-29, 2014		October 17, 2014		October 24, 2014		November 10, 2014		April 29-30, 2015		May 7, 2015		October 12, 2015		October 5, 2015		October 5-21, 2015		October 7, 2015		January 11-February 6, 2017		April 23-May16, 2018	
Well	Casing Elevation	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL	DWTW	GWEL		
ML-1 (30)*	21.55											19.13	2.42											18.96	2.59			19.01	2.54			19.41	2.14	18.69	2.86
ML-1 (40)*	21.57											19.06	2.51											18.95	2.62			18.97	2.60			19.41	2.16	18.67	2.90
ML-1 (50)*	21.55											19.03	2.52											18.94	2.61			18.91	2.64			19.38	2.17	18.65	2.90
ML-1 (60)*	21.56											19.06	2.50											18.97	2.59			19.03	2.53			19.41	2.15	18.68	2.88
ML-1 (65)*	21.57											19.03	2.54											18.97	2.60			19.00	2.57			19.41	2.16	18.70	2.87
ML-1 (70)*	21.55											19.08	2.47											18.94	2.61			18.97	2.58			19.41	2.14	18.65	2.90
ML-1 (80)*	21.57											19.18	2.39											18.98	2.59			18.99	2.58			19.42	2.15	18.75	2.82
ML-1 (90)	21.49											19.15	2.34											18.98	2.51			19.01	2.48			19.43	2.06	18.74	2.75
ML-2 (30)*	6.17											3.13	3.04			3.39	2.78	3.58	2.59	2.76	3.41			3.24	2.93			3.28	2.89			3.60	2.57	2.45	3.72
ML-2 (40)*	6.21											3.13	3.08							2.90	3.31			3.28	2.93			3.30	2.91			3.66	2.55	2.52	3.69
ML-2 (50)*	6.18											3.09	3.09							2.92	3.26			3.25	2.93			3.31	2.87			3.64	2.54	2.43	3.75
ML-2 (60)*	6.19											3.13	3.06							2.77	3.42			3.26	2.93			3.29	2.90			3.56	2.63	2.44	3.75
ML-2 (65)*	6.19											3.13	3.06							2.80	3.39			3.25	2.94			3.30	2.89			3.56	2.63	2.51	3.68
ML-2 (70)*	6.17											3.12	3.05							2.75	3.42			3.22	2.95			3.29	2.88			3.54	2.63	2.33	3.84
ML-2 (80)*	6.22											3.09	3.13							2.82	3.40			3.27	2.95			3.31	2.91			3.60	2.62	2.50	3.7

Table 1

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185

Groundwater Gauging Results
EAR Field Screening



		PT Download		PT Download		PT Download		PT Download		PT Download		GWS Round 1		PT Download		PT Download		PT Download		PT Removal		Gauging Event		Gauging Event		GWS Round 2		GWS Round 2		GWS Round 2		GWS Round 3		GWS Round 4			
		March 6-7 2014		March 14, 2014		April 1, 2014		April 10, 2014		April 14, 2014		July 8-29, 2014		October 17, 2014		October 24, 2014		November 10, 2014		April 29-30, 2015		May 7, 2015		October 12, 2015		October 5, 2015		October 5-21, 2015		October 7, 2015		January 11-February 6, 2017		April 23-May16, 2018			
Well	Casing Elevation	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL				
SP-35P	27.53											22.05	5.48															22.70	4.83			23.15	4.38	21.12	6.41		
SP-36	27.50											22.79	4.71															24.63	2.87^			22.80	4.70	20.87	6.63		
SP-37	29.00											25.10	3.90															23.96	5.04^			24.17	4.83	22.44	6.56		
SP-39	20.00											17.97	2.03															18.00	2.00			18.11	1.89	17.17	2.83		
SP-40	10.16	7.21	2.95	7.27	2.89			6.53	3.63			7.45	2.71	7.74	2.42					7.09	3.07							7.35	2.81			7.59	2.57	6.80	3.36		
SP-41	23.07											19.75	3.32															19.92	3.15			20.10	2.97	18.82	4.25		
SP-42	26.17	21.77	4.40	21.64	4.53			20.90	5.27			22.30	3.87	22.42	3.75					21.13	5.04							22.09	4.08			22.35	3.82	20.70	5.47		
SP-43	26.07											21.34	4.73															21.84	4.23			24.25	1.82	20.26	5.81		
SP-44	22.14											18.52	3.62															18.82	3.32			18.53	3.61	17.05	5.09		
SP-45	21.54	17.38	4.16	17.29	4.25			16.51	5.03			17.38	4.16	18.11	3.43					16.86	4.68							17.90	3.64			18.08	3.46	16.45	5.09		
SP-46	25.00											18.67	6.33															19.29	5.71			19.60	5.40	17.70	7.30		
SP-47	25.00											21.22	3.78															21.58	3.42			21.75	3.25	20.39	4.61		
SP-48	23.05											19.03	4.02															19.34	3.71			19.35	3.70	18.02	5.03		
SP-48P	22.80											21.27	1.53															19.19	3.61			19.52	3.28	17.98	4.82		
SP-49	26.68											21.91	4.77															22.33	4.35			22.62	4.06	20.98	5.70		
SP-50M	37.77											27.50	10.27															28.70	9.07			29.04	8.73	26.32	11.45		
SP-50A	37.80											27.50	10.30															DRY	DRY			DRY	DRY	26.38	11.42		
SP-52M	35.71											27.07	8.64															28.05	7.66			28.56	7.15	26.10	9.61		
SP-52A	35.71					27.16	8.55	26.72	8.99			27.04	8.67	28.08	7.63			28.23	7.48	26.39	9.32						28.05	7.66^			28.36	7.35	26.10	9.61			
SP-53	39.07											28.65	10.42							27.91	11.16							29.79	9.28			30.21	8.86	27.62	11.45		
SP-54 (2")	38.00											28.39	9.61															29.51	8.49			29.93	8.07	27.44	10.56		
SP-54 (3/4")	38.00											28.48	9.52															29.68	8.32			29.99	8.01	27.50	10.50		
SP-55	38.52											28.21	10.31			29.50	9.02			27.68	10.84							29.54	8.98			29.93	8.59	27.42	11.10		
SP-56	35.00											26.96	8.04															28.14	6.86			26.32	8.68	25.94	9.06		
SP-57	35.00											30.76	4.24															NA	NA			27.84	7.16	25.41	9.59		
SP-60																																DRY	DRY	DRY	DRY		
SP-61	41.00											30.32	10.68																31.42	9.58			32.01	8.99	29.35	11.65	
SP-62	40.98											28.56	12.42																DRY	NA			DRY	DRY	27.62	13.36	
SP-63	37.97											29.85	8.12																30.62	7.35			31.04	6.93	29.00	8.97	
SP-63A	37.97	27.80	10.17	27.63	10.34			26.98	10.99			27.11	10.86			28.16	9.81	28.23	9.74	26.49	11.48								28.15	9.82			29.62	8.35	26.30	11.67	
SP-63B	35.94											30.50	5.44																26.15	9.79			30.52	5.42	24.18	11.76	
SP-63C	37.86											27.01	10.85																28.12	9.74			28.58	9.28	26.20	11.66	
SP-64	41.00											31.78	9.22																32.48	8.52			32.79	8.21	31.13	9.87	
SP-65	41.00																																	DRY	DRY	29.70	11.30
SP-66	39.24																																	DRY	DRY	DRY	DRY
SP-66D	39.14											29.65	9.49																30.45	8.69			30.79	8.35	28.64	10.50	
SP-68	38.31											27.78	10.53																28.22	10.09^			28.40	9.91	27.15	11.16	
SP-69	31.66	25.19	6.47	25.01</																																	

Table 1

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185

Groundwater Gauging Results
EAR Field Screening



		PT Download		PT Download		PT Download		PT Download		PT Download		GWS Round 1		PT Download		PT Download		PT Download		PT Removal		Gauging Event		Gauging Event		GWS Round 2		GWS Round 2		GWS Round 2		GWS Round 3		GWS Round 4			
		March 6-7 2014		March 14, 2014		April 1, 2014		April 10, 2014		April 14, 2014		July 8-29, 2014		October 17, 2014		October 24, 2014		November 10, 2014		April 29-30, 2015		May 7, 2015		October 12, 2015		October 5, 2015		October 5-21, 2015		October 7, 2015		January 11-February 6, 2017		April 23-May16, 2018			
Well	Casing Elevation	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL	DTW	GWEL				
SP-91	18.17																																				
SP-97	10.00																			5.98	4.02									16.91	1.26	16.60	1.57				
SP-98	14.00																			13.46	0.54									13.95	0.05^			14.02	-0.02	13.00	1.00

Bold Values- Well casing was not surveyed and elevation values are estimated. Therefore, water level elevations are estimated.

*Casing elevation derived by measuring the length between top of piezometer and top of ground surface, and adjusting for difference using known elevation of casing of ML-1 (90), ML-2 (120), ML-3 (120), ML-5 (120).

**Data collected on October 6, 2015

NA - Data not available due to possible field error

NM - Not Measured

^Values not included in data set complied to generate groundwater elevation contour lines

Table 2



Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185

Groundwater Sampling Laboratory Analytical Results -April through June 2018
TestAmerica Laboratories, Inc., EPA Method 8260C
VOCs (ug/L)

Location	Depth	Date Collected	Carbon Tetrachloride	Tetrachloroethene	Trichloroethylene	Chloroform	1,1 Dichloroethene	1,1,1 Trichloroethane	1,2 Dichloroethane	MTBE	Benzene	Total BTEX	1,1,1,2 Tetrachloroethane	1,1,2 Trichloroethane	1,1,2,2 Tetrachloroethane	1,3 Dichlorobenzene	Chlorobenzene	Diethyl ether	Freon 113	Methylene Chloride	Total VOCs
ML-1_30	15-30	5/1/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
ML-1_40	39-40	5/1/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
ML-1_50	49-50	5/1/2018	<1	<1	<1	0.47 J	<1	<1	<1	0.89 J	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	1
ML-1_60	59-60	5/1/2018	<1	<1	<1	0.88 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.88
ML-1_65	64-65	5/1/2018	<1	<1	<1	0.39 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.39
ML-1_70	69-70	5/1/2018	<1	<1	<1	0.55 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.55
ML-1_80	79-80	5/2/2018	<1	0.29 J	<1	1.9	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	2
ML-1_90	89-90	5/2/2018	<1	<1	<1	0.38 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.38
ML-2_30	15-30	5/2/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
ML-2_40	39-40	5/2/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
ML-2_50	49-50	5/2/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
ML-2_60	59-60	5/2/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
ML-2_65	64-65	5/2/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
ML-2_70	69-70	5/2/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
ML-2_80	79-80	5/2/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
ML-2_90	89-90	5/2/2018	<1	<1	<1	<1	<1	<1	<1	0.45 J	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.45
ML-2_120	119-120	5/2/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
ML-3_30	15-30	5/2/2018	<1	<1	<1	0.59 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.59
ML-3_40	39-40	5/2/2018	<1	<1	<1	1.2	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	1
ML-3_50	49-50	5/2/2018	<1	<1	<1	0.56 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.56
ML-3_60	59-60	5/2/2018	<1	0.13 J	<1	1.4	<1	<1	<1	0.42 J	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	2
ML-3_65	64-65	5/2/2018	<1	<1	<1	0.66 J	<1	<1	<1	0.64 J	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	1
ML-3_70	69-70	5/2/2018	<1	<1	<1	0.54 J	<1	<1	<1	0.17 J	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.71
ML-3_80	79-80	5/2/2018	<1	<1	0.99 J	0.60 J	<1	<1	<1	0.21 J	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	2
ML-3_90	89-90	5/2/2018	<1	<1	<1	0.41 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.41
ML-3_120	119-120	5/2/2018	<1	<1	<1	0.33 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.33
ML-5_30	15-30	5/2/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
ML-5_40	39-40	5/2/2018	<1	<1	<1	0.34 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.34
ML-5_50	49-50	5/2/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
ML-5_60	59-60	5/2/2018	<1	<1	<1	9.8	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	10
ML-5_65	64-65	5/2/2018	<1	0.15 J	<1	1.3	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	1
ML-5_70	69-70	5/2/2018	<1	0.33 J	<1	1.4	<1	<1	<1	0.19 J	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	2
ML-5_80	79-80	5/3/2018	<1	0.61 J	0.56 J	3.6	<1	<1	0.28 J	0.24 J	<1	<3	<1	<1	<1	<1	1.1	<1	<1	<1	6
ML-5_90	89-90	5/3/2018	<1	<1	<1	3.4	<1	<1	<1	0.30 J	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	4
ML-5_120	119-120	5/3/2018	<1	<1	<1	1.9	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	0.14 J	<1	<1	2
SP-1M	25-35	5/14/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-1	80.88-81.88	5/14/2018	<1	4.9	0.79 J	0.74 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	6
SP-5M	26-27	4/30/2018	<1	<1	<1	<1	<1	<1	<1	0.85 J	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.85
SP-5A	120.86-121.86	4/30/2018	<1	16	1.5	1.2	<1	<1	0.27 J	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	19
SP-5B	151.73-152.73	5/1/2018	<1	2.5	0.54 J	0.49 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	4
SP-16	28.97-29.97	5/7/2018	<1	<1	<1	0.49 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.49
SP-16P	76-77	5/4/2018	<1	1.7	0.74 J	1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	3
SP-18	28.63-29.63	5/7/2018	<1	<1	<1	0.38 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.38
SP-18D	77-78	5/4/2018	<1	7.8	1.1	0.81 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	10
SP-19	29-30	5/4/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-20	28.45-29.45	5/7/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-21S	25-30	5/7/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-22S	25-30	5/7/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-22P	75-80	4/26/2018	<1	26	6.2	1.2	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	33
SP-23	28.18-29.18	5/4/2018	<1	<1	<1	3.2	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	3
SP-23P	85-90	5/4/2018	19	28	30	140	<1	2.4	0.90 J	<1	<1	<3	<1	<1	<1	<1	<1	0.40 J	1.8	<1	223
SP-24	79.08-80.08	5/4/2018	5.3	25	13	29	<1	0.64 J	0.33 J	<1	<1	<3	<1	<1	<1	<1	<1	<1	0.46 J	<1	74
SP-25	23.29-24.29	5/4/2018	<1	<1	<1	0.31 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.31
SP-26P	79-80	5/8/2018	0.51 J	2.8	2.7	3.4	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	9
SP-27	69.22-70.22	5/4/2018	<1	6	0.86 J	0.82 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	8
SP-28	28.43-29.43	5/4/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-29	23.75-24.75	5/7/2018	<1	<1	<1	0.71 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.71
SP-30	28.3-29.3	5/7/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-31	29.09-30.09	5/7/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-32	28.59-29.59	5/4/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-34P	73.74-74.74	5/4/2018	<1	1.1	<1	0.57 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	2
SP-34D	120.08-121.08	5/4/2018	5.8	29	13	33	0.75 J	0.80 J													

Table 2

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185



Groundwater Sampling Laboratory Analytical Results -April through June 2018
TestAmerica Laboratories, Inc., EPA Method 8260C
VOCs (ug/L)

Location	Depth	Date Collected	Carbon Tetrachloride	Tetrachloroethene	Trichloroethylene	Chloroform	1,1 Dichloroethene	1,1,1 Trichloroethane	1,2 Dichloroethane	MTBE	Benzene	Total BTEX	1,1,1,2 Tetrachloroethane	1,1,2 Trichloroethane	1,1,2,2 Tetrachloroethane	1,3 Dichlorobenzene	Chlorobenzene	Diethyl ether	Freon 113	Methylene Chloride	Total VOCs
SP-48	121.13-122.13	5/9/2018	21	1	50	290	15	17	2.5	<1	<1	<3	<1	0.61 J	<1	<1	<1	1.1	3.5	0.32 J	402
SP-49	90.68-91.68	5/8/2018	<1	<1	<1	0.26 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.26
SP-50A	35.34-36.34	5/16/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-50M	85.51-86.51	4/30/2018	<1	280	5.2	2.1	<1	<1	0.27 J	<1	<1	<3	0.66 J	<1	0.47 J	<1	<1	<1	<1	<1	289
SP-52A	35.43-36.43	5/16/2018	<1	<1	<1	0.78 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.78
SP-52M	74.72-75.72	5/16/2018	<1	0.33 J	<1	0.51 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.84
SP-53	39.8-40.8	5/15/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-54_.75in	66.16-67.16	5/15/2018	<1	1.4	<1	0.50 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	2
SP-54_2in	39.2-40.2	5/15/2018	<1	<1	<1	0.93 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.93
SP-55	36.22-37.22	5/15/2018	<1	<1	<1	0.36 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.36
SP-56	73.39-74.39	5/16/2018	<1	0.31 J	<1	0.29 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.6
SP-57	39.31-40.31	5/16/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-61	38.93-39.93	5/11/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-62	39.98-40.98	5/16/2018	<1	<1	<1	0.25 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.25
SP-63	36.97-37.97	5/11/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-63A	36.97-37.97	5/11/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-63B	34.94-35.94	5/11/2018	<1	<1	<1	0.34 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.34
SP-63C	36.86-37.86	5/11/2018	<1	<1	<1	0.51 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.51
SP-64	38.36-39.36	5/14/2018	<1	<1	<1	2.2	<1	<1	<1	<1	<1	<3	<1	<1	<1	0.89 J	<1	<1	<1	<1	3
SP-66D	98.96-99.96	4/26/2018	<1	8.2	0.44 J	1.1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	10
SP-68	28.75-29.75	5/10/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	0.24 J	0.24
SP-69	28.7-29.7	5/10/2018	<1	<1	<1	1.4	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	0.34 J	2
SP-69D	87.72-88.72	5/10/2018	<1	17	0.39 J	1.5	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	0.31 J	19
SP-70	28.62-29.62	5/10/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	0.27 J	0.27
SP-71	30.05-31.05	5/4/2018	<1	<1	<1	1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	1
SP-72	24.89-25.89	5/3/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-72D	100.25-101.25	5/4/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-73	28.89-29.89	5/3/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-74	25.42-26.42	5/3/2018	<1	<1	<1	0.56 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.56
SP-74D	98.64-99.64	5/3/2018	3.5	48	1.1	12	2	2.4	<1	<1	<1	<3	<1	<1	<1	<1	<1	0.15 J	<1	<1	69
SP-75	28.87-29.87	5/3/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-76	28.58-29.58	5/3/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-77	27.97-28.97	5/11/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	0.34 J	<1	<1	<1	<1	0.34
SP-77D	98.76-99.76	5/11/2018	<1	1	1.6	2.4	<1	<1	0.38 J	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	5
SP-78	29.18-30.18	5/11/2018	<1	<1	<1	0.23 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.23
SP-79	29.3-30.3	5/11/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-80	28.74-29.74	5/10/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	0.31 J	0.31
SP-81	69.15-70.15	4/26/2018	4.1	62	1.9	34	2.4	2.5	<1	<1	<1	<3	<1	<1	<1	<1	<1	0.15 J	<1	<1	107
SP-82	22.38-23.38	5/3/2018	<1	<1	<1	1.5	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	2
SP-82M	83.01-84.01	5/3/2018	0.74 J	7.8	0.38 J	8.9	<1	0.35 J	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	18
SP-83	28.33-29.33	5/16/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-84	27.02-28.02	5/3/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-85	28.38-29.38	5/4/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-86	19-20	5/3/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-87	9.04-10.04	5/4/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-88	58.61-59.61	5/3/2018	<1	<1	<1	0.42 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.42
SP-89	29.45-30.45	5/10/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	0.26 J	0.26
SP-90	38.73-39.73	5/3/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-91	28.72-29.72	5/4/2018	<1	<1	<1	1.2	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	1
SP-97	15-20	5/4/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	<23
SP-98	25-30	5/4/2018	<1	<1	<1	0.61 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.61
The Garden Dept		5/9/2018	<1	<1	<1	0.45 J	<1	<1	<1	<1	<1	<3	<1	<1	<1	<1	<1	<1	<1	0.22 J	0.67
NYSDEC TOGS 111 Class GA Standard/Guidance			5	5	5	7	5	5	0.6	10	1	n/a	5	1	5	3	5	n/a	5	5	n/a

*The standard applies to each isomer separately
"J" value indicates estimated values
"B" the analyte was found in an associated blank, as well as in the sample

indicates values above NYSDEC TOGS111 Glass GA Standard/Guidance

The chemicals listed below were reported below the LRL:

1,1 Dichloroethane
1,2 Dichlorobenzene
1,4 Dichlorobenzene
Tert-Amyl-Methyl-Ether
Xylenes Total

Table 3

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185



Groundwater Sampling Laboratory Analytical Results -April through June 2018

TestAmerica Laboratories, Inc.

PFAS (ng/L), 1,4 Dioxane (ug/L)

Location	Depth	Date Collected	PFOS	PFOA	Combined PFOA & PFOS	N-MeFOSAA	N-EtFOSAA	PFBS	PFBA	PFDS	PFDA	PFDoA	PFHpS	PFHpA	PFHxS	PFHxA	PFNA	FOSA	PFPeA	PFTA/PFTeDA	PFTriA/PFTrDA	PFUA/PFUDa	8:2 FTS	6:2 FTS	1,4-Dioxane
SP-44P	66.15-67.15	4/27/2018	6.02	4.88	10.9	1.80 U	0.57 J	0.91 J	1.80 U	1.80 U	1.80 U	1.80 U	0.54 J	1.48 J	2.95 B	3.28 B	0.39 J	1.80 U	2.84 B	1.80 U	1.80 U	1.80 U	1.80 U	0.55 J	0.73
SP-48P	74.12-75.12	4/27/2018	2.86	3.23	6.09	1.79 U	1.79 U	1.19 J	1.22 U	1.79 U	1.79 U	1.79 U	1.79 U	1.56 J	1.73 U	2.23 B	0.57 J	1.79 U	1.62 U	1.79 U	1.79 U	1.79 U	1.79 U	1.79 U	0.21 U
SP-50M	85.51-86.51	4/30/2018	1.73 U	129	129	1.73 U	1.73 U	1.73 U	3.00	1.73 U	0.61 U	1.73 U	1.73 U	3.37	0.53 U	2.1 B	0.33 J	1.73 U	0.82 U	1.73 U	1.73 U	1.73 U	1.73 U	1.73 U	0.32
SP-66D	98.96-99.96	4/26/2018	1.81 U	1.81 U	<3.6	1.81 U	1.81 U	1.81 U	0.83 J	1.81 U	1.81 U	1.81 U	1.81 U	1.81 U	1.08 U	1.81 U	1.81 U	1.81 U	1.15 U	1.81 U	1.81 U	1.81 U	1.17 J	1.81 U	0.21 U
SP-81	69.15-70.15	4/26/2018	1.77 U	1.77 U	<3.54	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	0.49 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	4.2
GARDEN DEPT	80	6/1/2018	0.52 J	0.66 U	0.52	1.78 U	1.78 U	1.78 U	1.42 J	1.78 U	0.40 J	1.78 U	1.78 U	0.45 U	1.18 U	1.31 U	0.42 J	0.63 U	1.44 U	1.78 U	1.78 U	0.46 J	0.96 U	1.61 J	0.65
USEPA Health Advisory Level			n/a	n/a	70	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

indicates values above USEPA Health Advisory Level

"J" - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified 'J' data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

"B" - The analyte was found in an associated blank, as well as in the sample.

"U" - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is useable as a nondetect.

"UJ" - Analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The "UJ" data may be biased low.

PFOS - Perfluorooctanesulfonic Acid

PFOA - Perfluorooctanoic Acid

N-MeFOSAA - N-methyl perfluorooctanesulfonamidoacetic acid

N-EtFOSAA - N-ethyl perfluorooctanesulfonamidoacetic acid

PFBS - Perfluorobutanesulfonic Acid

PFBA - Perfluorobutyric Acid

PFDS - Perfluorodecanesulfonic acid

PFDA - Perfluorodecanoic Acid

PFDoA - Perfluorododecanoic Acid

PFHpS - Perfluoroheptane Sulfonate

PFHpA - Perfluoroheptanoic Acid

PFHxS - Perfluorohexanesulfonic Acid

PFHxA - Perfluorohexanoic Acid

PFNA - Perfluorononanoic Acid

FOSA - Perfluorooctane Sulfonamide

PFPeA - Perfluoropentanoic Acid

PFTA/PFTeDA - Perfluorotetradecanoic Acid

PFTriA/PFTrDA - Perfluorotridecanoic Acid

PFUA/PFUDa - Perfluoroundecanoic Acid

8:2 FTS - SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE

6:2 FTS - SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE

Table 4

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185



Groundwater Analytical Results - April through June 2018
EAR Field Screening

Location	Depth	Date Collected	Conductivity (uS)	Dissolved Oxygen (mg/L)	ORP (Oxidation Reduction Potential) (mV)	pH	Temperature °C
ML-1_30	15-30	5/1/2018	644	0.42	128.6	6.3	11.5
ML-1_40	39-40	5/1/2018	219	0.61	138.9	4.3	11.3
ML-1_50	49-50	5/1/2018	111	0.60	145.6	4.3	11.7
ML-1_60	59-60	5/1/2018	146	0.77	121.0	5.2	11.6
ML-1_65	64-65	5/1/2018	199	0.73	111.3	4.7	11.6
ML-1_70	69-70	5/1/2018	290	0.97	109.9	5.6	11.6
ML-1_80	79-80	5/2/2018	156	0.78	210.2	5.2	11.6
ML-1_90	89-90	5/2/2018	123	0.84	124.2	6.6	11.9
ML-2_120	119-120	5/2/2018	304	0.86	52.5	7.3	11.7
ML-2_30	15-30	5/2/2018	1,111	0.79	-43.2	7.8	10.4
ML-2_40	39-40	5/2/2018	1,079	0.66	11.4	7.1	12.1
ML-2_50	49-50	5/2/2018	653	0.61	21.3	7.1	12.2
ML-2_60	59-60	5/2/2018	736	0.64	113.2	5.9	12.0
ML-2_65	64-65	5/2/2018	688	0.47	158.9	5.5	11.9
ML-2_70	69-70	5/2/2018	1,009	0.33	132.8	5.6	11.7
ML-2_80	79-80	5/2/2018	607	1.00	151.8	5.6	11.7
ML-2_90	89-90	5/2/2018	511	0.78	147.7	6.0	11.8
ML-3_120	119-120	5/2/2018	4,934	3.96	-63.9	5.5	12.7
ML-3_30	15-30	5/2/2018	168	4.37	-101.8	5.7	11.7
ML-3_40	39-40	5/2/2018	157	4.76	-61.9	5.0	13.2
ML-3_50	49-50	5/2/2018	174	4.89	-47.9	5.0	12.8
ML-3_60	59-60	5/2/2018	165	6.83	-27.4	5.1	12.7
ML-3_65	64-65	5/2/2018	143	8.63	-23.8	5.2	12.8
ML-3_70	69-70	5/2/2018	63	9.65	-55.8	5.3	13.0
ML-3_80	79-80	5/2/2018	127	8.87	-33.6	5.5	12.8
ML-3_90	89-90	5/2/2018	85	8.96	-44.6	5.8	13.0
ML-5_120	119-120	5/3/2018	154	0.41	379.8	5.0	13.0
ML-5_30	15-30	5/2/2018	220	0.98	190.3	6.1	13.7
ML-5_40	39-40	5/2/2018	235	0.87	248.7	4.7	13.5
ML-5_50	49-50	5/2/2018	149	0.72	218.5	5.7	13.4
ML-5_60	59-60	5/2/2018	292	0.97	275.9	4.3	13.1
ML-5_65	64-65	5/2/2018	298	0.95	301.1	4.5	13.0
ML-5_70	69-70	5/2/2018	284	0.77	312.0	4.8	12.9
ML-5_80	79-80	5/3/2018	248	0.29	290.7	4.4	12.8
ML-5_90	89-90	5/3/2018	253	0.30	331.1	4.3	12.7
SP-1	25-35	5/14/2018	148	0.94	222.0	5.2	10.4
SP-16	80.88-81.88	5/7/2018	295	9.45	-72.5	5.3	12.8
SP-16P	28.97-29.97	5/4/2018	146	8.04	212.9	5.5	12.7
SP-18	76-77	5/7/2018	555	6.18	-116.7	5.6	13.4
SP-18D	28.62-29.62	5/4/2018	55	9.90	220.2	5.1	12.9
SP-19	77-78	5/4/2018	343	0.74	263.9	5.2	13.1
SP-1M	26-27	5/14/2018	170	1.45	220.1	5.3	9.6
SP-20	29-30	5/7/2018	542	10.58	-65.2	5.6	12.3
SP-21S	28.45-29.45	5/7/2018	299	9.58	-62.3	5.4	12.3
SP-22P	25-30	4/26/2018	217	0.62	128.9	5.4	12.0
SP-22S	25-30	5/7/2018	549	1.53	240.3	6.1	11.6
SP-23	75-80	5/4/2018	460	12.39	189.7	6.0	12.2

Table 4

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185



Groundwater Analytical Results - April through June 2018
EAR Field Screening

Location	Depth	Date Collected	Conductivity (uS)	Dissolved Oxygen (mg/L)	ORP (Oxidation Reduction Potential) (mV)	pH	Temperature °C
SP-23P	28.18-29.18	5/4/2018	49	12.84	157.4	5.8	12.5
SP-24	85-90	5/4/2018	245	5.71	194.3	5.4	13.0
SP-25	79.08-80.08	5/4/2018	259	0.58	320.2	5.4	11.7
SP-26P	23.29-24.29	5/8/2018	171	0.98	200.0	5.1	12.7
SP-27	79-80	5/4/2018	45	9.72	251.9	4.8	12.5
SP-28	69.22-70.22	5/4/2018	619	2.46	194.1	5.8	11.4
SP-29	28.43-29.43	5/7/2018	741	9.51	-98.2	5.9	12.1
SP-30	28.3-29.3	5/7/2018	321	6.14	-155.0	5.7	11.8
SP-31	29.09-30.09	5/7/2018	744	0.69	241.8	5.7	12.6
SP-32	28.59-29.59	5/4/2018	650	8.39	-83.6	7.5	10.6
SP-34D	120.08-121.08	5/4/2018	186	4.15	-21.3	5.5	12.5
SP-34P	73.74-74.74	5/4/2018	384	7.91	23.6	5.1	12.3
SP-35	27.95-28.95	5/4/2018	225	0.92	290.3	6.2	12.0
SP-35P	77.81-78.81	5/7/2018	159	0.75	299.5	5.4	12.8
SP-36	28.37-29.37	5/7/2018	190	0.81	272.2	6.0	11.8
SP-37	28.1-29.1	5/7/2018	777	0.85	226.4	5.9	12.7
SP-39	29.11-30.11	5/9/2018	311	1.02	166.5	5.3	12.7
SP-40	17.48-18.48	5/9/2018	571	1.54	147.1	6.1	10.0
SP-41	28.33-29.33	5/8/2018	256	0.75	138.2	5.1	12.4
SP-42	31.21-32.21	5/8/2018	80	0.75	170.2	5.1	11.4
SP-43	29.04-30.04	5/4/2018	369	0.76	299.9	5.8	12.0
SP-44P	66.15-67.15	4/27/2018	181	0.70	211.1	4.9	11.7
SP-45	28.91-29.91	5/8/2018	136	0.90	149.8	5.6	12.5
SP-46	27.56-28.56	5/8/2018	304	1.38	204.8	5.0	12.5
SP-47	29.1-30.1	5/9/2018	167	0.98	159.6	5.4	12.2
SP-48	121.13-122.13	5/9/2018	375	1.34	424.8	5.5	12.5
SP-48P	74.12-75.12	4/27/2018	134	0.85	270.0	5.1	11.4
SP-49	90.68-91.68	5/8/2018	264	0.80	197.3	5.1	12.6
SP-50A	27-28	5/16/2018	342	8.86	-182.8	6.6	11.3
SP-50M	85.51-86.51	4/30/2018	121	2.11	158.0	5.7	11.2
SP-52A	35.43-36.43	5/16/2018	325	0.80	180.1	5.4	11.5
SP-52M	74.72-75.72	5/16/2018	281	0.82	169.4	5.3	11.5
SP-53	39.8-40.8	5/15/2018	582	4.91	178.6	5.9	11.3
SP-54_.75in	66.16-67.16	5/15/2018	544	3.61	180.9	5.7	11.1
SP-54_2in	39.2-40.2	5/15/2018	563	4.01	186.9	5.5	11.3
SP-55	36.22-37.22	5/15/2018	529	4.27	175.8	5.6	11.4
SP-56	36.22-37.22	5/16/2018	248	0.85	175.1	6.0	11.2
SP-57	73.39-74.39	5/16/2018	275	1.65	140.1	5.9	11.0
SP-5A	120.86-121.86	4/30/2018	162	1.89	101.2	5.4	11.2
SP-5B	151.73-152.73	5/1/2018	245	0.79	108.3	5.4	10.8
SP-5M	26-27	4/30/2018	192	1.44	118.9	5.7	11.0
SP-61	39.31-40.31	5/11/2018	72	12.75	-346.0	13.2	12.1
SP-62	28-29	5/16/2018	349	10.86	-185.8	6.7	11.4
SP-63	38.93-39.93	5/11/2018	207	12.26	-16.2	9.5	12.3
SP-63A	36.97-37.97	5/11/2018	201	11.30	-302.0	14.4	12.3
SP-63B	36.97-37.97	5/11/2018	248	10.87	-270.8	6.8	11.5
SP-63C	34.94-35.94	5/11/2018	224	11.62	-270.8	13.7	12.0

Table 4

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185



Groundwater Analytical Results - April through June 2018
EAR Field Screening

Location	Depth	Date Collected	Conductivity (uS)	Dissolved Oxygen (mg/L)	ORP (Oxidation Reduction Potential) (mV)	pH	Temperature °C
SP-64	36.86-37.86	5/14/2018	125	1.02	218.9	4.7	12.7
SP-66D	98.96-99.96	4/26/2018	124	1.75	120.4	5.8	12.3
SP-68	28.75-29.75	5/10/2018	373	0.45	242.5	4.3	11.9
SP-69	28.7-29.7	5/10/2018	230	0.49	209.2	4.6	11.7
SP-69D	87.72-88.72	5/10/2018	141	0.44	159.2	5.7	11.8
SP-70	28.62-29.62	5/10/2018	124	0.46	216.2	4.5	11.6
SP-71	30.05-31.05	5/4/2018	213	3.35	203.3	5.3	12.0
SP-72D	25-26	5/4/2018	50	1.00	117.4	6.2	11.7
SP-73	100.25-101.25	5/3/2018	229	6.18	180.9	5.2	11.2
SP-74	28.89-29.89	5/3/2018	63	8.26	143.1	5.4	11.6
SP-74D	25.42-26.42	5/3/2018	45	8.12	97.9	6.2	11.7
SP-75	98.64-99.64	5/3/2018	71	9.74	160.2	5.4	11.2
SP-76	28.87-29.87	5/3/2018	93	9.40	203.5	4.5	11.0
SP-77	28.58-29.58	5/11/2018	207	0.89	210.2	4.5	11.6
SP-77D	27.97-28.97	5/11/2018	254	1.25	192.0	5.9	11.9
SP-78	29.18-30.18	5/11/2018	149	0.45	187.8	5.1	11.7
SP-79	29.3-30.3	5/11/2018	290	0.75	184.4	5.3	12.1
SP-80	28.74-29.74	5/10/2018	849	0.77	223.3	5.8	11.6
SP-81	69.15-70.15	4/26/2018	48	1.12	137.1	6.2	12.1
SP-82	22.38-23.38	5/3/2018	143	10.94	-180.4	6.9	11.8
SP-82M	83.01-84.01	5/3/2018	106	6.69	212.5	7.4	12.1
SP-83	28.33-29.33	5/16/2018	412	0.47	224.8	5.6	11.3
SP-84	27.02-28.02	5/3/2018	374	0.64	319.0	5.6	11.8
SP-85	28.38-29.38	5/4/2018	111	0.69	348.5	5.3	12.1
SP-86	19-20	5/3/2018	435	0.74	290.6	5.9	12.1
SP-87	9.04-10.04	5/4/2018	275	0.54	301.5	6.0	11.9
SP-88	58.61-59.61	5/3/2018	134	8.66	267.0	5.0	11.5
SP-89	29.45-30.45	5/10/2018	89	0.82	208.0	5.2	9.5
SP-90	38.73-39.73	5/3/2018	208	8.95	49.4	5.7	12.0
SP-91	28.72-29.72	5/4/2018	136	5.87	-87.9	5.6	11.3
SP-97	15-20	5/4/2018	612	7.95	-16.4	6.0	10.2

NM = Not Measured

*Values were reported as logged by technician. Values are above average and may be considered an anomaly.

Table 5

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185



Blind Duplicates Results
TestAmerica Laboratories, Inc., EPA Method 8260C
VOCs (ug/L)

	Well	Date Collected	Carbon Tetrachloride	Tetrachloroethene	Trichloroethylene	Chloroform	1,1 Dichloroethane	1,1 Dichloroethene	1,1,1 Trichloroethane	1,2 Dichloroethane	t butylmethylether	Benzene	Xylenes Total	Total BTEX	1,1,1,2 Tetrachloroethane	1,1,2 Trichloroethane	1,1,2,2 Tetrachloroethane	1,2 Dichlorobenzene	1,3 Dichlorobenzene	1,4 Dichlorobenzene	Chlorobenzene	Diethyl ether	Freon 113	Methylene Chloride	Tert-Amyl-Methyl-Ether
Original Sample	SP-5A	4/30/2018	<1	16	1.5	1.2	<1	<1	<1	0.27 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Blind Duplicate	SP-A	4/30/2018	<1	16	1.6	1.1	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Relative Percent Difference			0 %	0 %	6.45 %	8.7 %	0 %	0 %	0 %	n/a	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Original Sample	SP-63A	5/11/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Blind Duplicate	SP-B	5/11/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Relative Percent Difference			0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Original Sample	SP-78	5/11/2018	<1	<1	<1	0.23 J	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Blind Duplicate	SP-C	5/11/2018	<1	<1	<1	0.23 J	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Relative Percent Difference			0 %	0 %	0 %	n/a	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Original Sample	SP-72	5/3/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Blind Duplicate	SP-D	5/3/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Relative Percent Difference			0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Original Sample	SP-82M	5/3/2018	0.74 J	7.8	0.38 J	8.9	<1	<1	0.35 J	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Blind Duplicate	SP-E	5/3/2018	0.77 J	7.5	0.4 J	8.9	<1	<1	0.4 J	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Relative Percent Difference			n/a	3.92 %	n/a	0 %	0 %	0 %	n/a	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Original Sample	SP-28	5/4/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Blind Duplicate	SP-F	5/4/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Relative Percent Difference			0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Original Sample	SP-42	5/8/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Blind Duplicate	SP-H	5/8/2018	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Relative Percent Difference			0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Original Sample	SP-48P	4/27/2018	<1	<1	<1	0.43 J	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Blind Duplicate	SP-I	4/27/2018	<1	<1	<1	0.38 J	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Relative Percent Difference			0 %	0 %	0 %	n/a	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Original Sample	ML-5_70	5/2/2018	<1	0.33 J	<1	1.4	<1	<1	<1	<1	0.19 J	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Blind Duplicate	SP-J	5/2/2018	<1	0.39 J	<1	1.4	<1	<1	<1	<1	0.22 J	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Relative Percent Difference			0 %	n/a	0 %	0 %	0 %	0 %	0 %	0 %	n/a	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Original Sample	ML-1_70	5/1/2018	<1	<1	<1	0.55 J	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Blind Duplicate	SP-K	5/1/2018	<1	<1	<1	0.58 J	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Relative Percent Difference			0 %	0 %	0 %	n/a	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Original Sample	ML-2_90	5/2/2018	<1	<1	<1	<1	<1	<1	<1	<1	0.45 J	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Blind Duplicate	SP-L	5/2/2018	<1	<1	<1	<1	<1	<1	<1	<1	0.49 J	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Relative Percent Difference			0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	n/a	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %
Original Sample	ML-3_65	5/2/2018	<1	<1	<1	0.66 J	<1	<1	<1	<1	0.64 J	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Blind Duplicate	SP-M	5/2/2018	<1	<1	<1	0.69 J	<1	<1	<1	<1	0.6 J	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Relative Percent Difference			0 %	0 %	0 %	n/a	0 %	0 %	0 %	0 %	n/a	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %	0 %

"J" indicates estimated values
J values not utilized to calculate relative percent difference

Table 5 (continued)



Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185

Blind Duplicates Results
TestAmerica Laboratories, Inc.
PFAS (ng/L), 1,4 Dioxane (ug/L)

	Well	Date Collected	N-MeFOSAA	Combined PFOA & PFOS	N-EtFOSAA	PFBS	PFBA	PFDS	PFDA	PFDoA	PFHpS	PFHpA	PFHxS	PFHxA	PFNA	FOSA	PFOS	PFOA	PFPeA	PFTA/PFTeDA	PFTriA/PFTrDA	PFUA/PFUdA	8:2 FTS	6:2 FTS	1,4-Dioxane	1,4-Dioxane-D8
Original Sample	SP-5A	4/30/2018	2.75	1.77 U	1.77 U	1.67 J	0.79 J	1.77 U	0.56 U	1.77 U	0.53 J	0.42 J	1.07 U	0.80 U	0.32 J	1.77 U	1.77 U	2.75	0.77 U	1.77 U	0.47 J	1.77 U	1.77 UJ	1.77 UJ	0.21 U	11
Blind Duplicate	SP-A	4/30/2018	<1.71	2.68	<1.71	<1.71	0.47 J	<1.71	<1.71	<1.71	<1.71	0.43 J	0.96 U	1.11 U	<1.71	<1.71	<1.71	2.68	<1.71	<1.71	<1.71	<1.71	<1.71 UJ	<1.71 UJ	<0.21	11
Relative Percent Difference			0 %	2.58 %	0 %	n/a	n/a	0 %	n/a	0 %	n/a	n/a	n/a	n/a	n/a	0 %	0 %	2.58 %	n/a	0 %	n/a	0 %	0 %	0 %	0 %	0 %
Original Sample	SP-48	4/27/2018	<1.79	6.09	<1.79	1.19 J	1.22 U	<1.79	<1.79	<1.79	<1.79	1.56 J	1.73 U	2.23	0.57 J	<1.79	2.86	3.23	1.62 U	<1.79	<1.79	<1.79	<1.79 UJ	<1.79 UJ	<0.21	n/a
Blind Duplicate	SP-I	4/27/2018	<1.68	6.21	<1.68	0.93 J	1.96	<1.68	<1.68	<1.68	<1.68	1.53 J	1.22 U	1.13 U	0.30 J	<1.68	2.77	3.44	2.34	<1.68	<1.68	<1.68	<1.68 UJ	<1.68 UJ	<0.21	n/a
Relative Percent Difference			0 %	1.95 %	0 %	n/a	n/a	0 %	0 %	0 %	0 %	n/a	n/a	n/a	n/a	0 %	3.20 %	6.30 %	n/a	0 %	0 %	0 %	0 %	0 %	0 %	n/a

^SP-48 was incorrectly labeled as SP-48P in the field during the April GWS event.

"J" value indicates estimated values; QC analysis fails outside the primary acceptance values; data may be biased high or low or the direction of the bias may be indeterminable.

"B" the analyte was found in an associated blank, as well as in the sample.

"U" the analyte was analyzed for, but due to blank contamination was flagged as nondetect. The result is useable as a nondetect.

"UJ" analyte was not detected above the reported sample quantitation limit. QC analysis fails outside the primary acceptance limits; data may be biased low.

Values with qualifiers are not utilized to calculate relative percent difference.

Notes

N-MeFOSAA - N-methyl perfluorooctanesulfonamidoacetic acid

N-EtFOSAA - N-ethyl perfluorooctanesulfonamidoacetic acid

PFBS - Perfluorobutanesulfonic Acid

PFBA - Perfluorobutyric Acid

PFDS - Perfluorodecanesulfonic acid

PFDA - Perfluorodecanoic Acid

PFDoA - Perfluorododecanoic Acid

PFHpS - Perfluoroheptane Sulfonate

PFHpA - Perfluoroheptanoic Acid

PFHxS - Perfluorohexanesulfonic Acid

PFHxA - Perfluorohexanoic Acid

PFNA - Perfluorononanoic Acid

FOSA - Perfluorooctane Sulfonamide

PFOS - Perfluorooctanesulfonic Acid

PFOA - Perfluorooctanoic Acid

PFPeA - Perfluoropentanoic Acid

PFTA/PFTeDA - Perfluorotetradecanoic Acid

PFTriA/PFTrDA - Perfluorotridecanoic Acid

PFUA/PFUdA - Perfluoroundecanoic Acid

8:2 FTS - SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE

6:2 FTS - SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE

Groundwater Sampling Laboratory Analytical Results - Historical Data
Suffolk County Department of Health (SCDHS), Method Unknown
TestAmerica Laboratories, Inc., EPA Method 8260C
VOCs (ug/L)

[illegible]



**ENVIRONMENTAL
ASSESSMENT &
REMEDIATIONS**

Groundwater Sampling Laboratory Analytical Results - Historical Data
Suffolk County Department of Health (SCDHS), Method Unknown
TestAmerica Laboratories, Inc., EPA Method 8260C
VOCs (ug/L)

2 of 9

Table 6

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185



Groundwater Sampling Laboratory Analytical Results - Historical Data
Suffolk County Department of Health (SCDHS), Method Unknown
TestAmerica Laboratories, Inc., EPA Method 8260C
VOCs (ug/L)

Location	Depth	Date Collected	Lab	Carbon Tetrachloride	Tetrachloroethene	Trichloroethylene	Chloroform	MTBE	Benzene	Xylenes Total	Total BTEX	1,1 Dichloroethane	1,1,1,2 Tetrachloroethane	1,1,2 Trichloroethane	1,1,2,2 Tetrachloroethane	1,3 Dichlorobenzene	Chlorobenzene	Diethyl ether	Freon 113	Methylene Chloride
SP-1	75-80	7/23/2014	TestAmerica, Inc.	<1	28	2.3	0.94 J	<1	<1	<2	<3	<1	<1	<1	<1	0.18 J	<1	<1	<1	<1
SP-1	75-81	10/21/2015	TestAmerica, Inc.	<1	20	2.1	1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-1	75-82	2/1/2017	TestAmerica, Inc.	<1	8.8	1.6	1.2	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-1	75-83	5/14/2018	TestAmerica, Inc.	<1	4.9	0.79 J	0.74 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-5M	26-27	8/18/2008	SCDHS	<0	<0	<0	0.8	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-5M	26-27	1/26/2009	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-5M**	26-27	7/23/2014	TestAmerica, Inc.	0.07 J	62	2.2	0.70 J	<1	<1	<2	<3	<1	<1	<1	<1	0.22 J	<1	<1	<1	<1
SP-5M	26-27	10/16/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-5M**	26-27	2/2/2017	TestAmerica, Inc.	<1	33	1.8	0.80 J	<1	<1	<2	<3 J	<1	<1	<1	<1	0.90 J	<1	<1	<1	<1
SP-5M	26-27	4/30/2018	TestAmerica, Inc.	<1	<1	<1	<1	0.85 J	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-5_70-75	70-75	8/18/2008	SCDHS	<0	74	5.7	1.7	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-5_70-75	70-75	1/26/2009	SCDHS	<0	66	5.5	1.7	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-5_70-75	70-75	11/16/2010	SCDHS	<0	90	5	0.8	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-5_70-75	70-75	9/22/2011	SCDHS	<0	85	4.4	0.8	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-5A**	122	7/23/2014	TestAmerica, Inc.	<1	<1	<1	0.31 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-5A	124	10/16/2015	TestAmerica, Inc.	<1	54	2.1	0.69 J	0.21 J	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-5A**	122	2/2/2017	TestAmerica, Inc.	<1	<1	<1	0.49 J	<1	<1	<2	<3 J	<1	<1	<1	<1	0.52 J	<1	<1	<1	<1
SP-5A	124	4/30/2018	TestAmerica, Inc.	<1	16	1.5	1.2	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-5B	140-145	8/18/2008	SCDHS	<0	0.8	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-5B	152	7/23/2014	TestAmerica, Inc.	<1	17	0.50 J	0.48 J	<1	<1	<2	<3	<1	<1	0.30 J	<1	<1	<1	<1	<1	<1
SP-5B	152	10/16/2015	TestAmerica, Inc.	<1	2.7	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-5B	152	2/2/2017	TestAmerica, Inc.	<1	1.9	0.59 J	<1	<1	<1	<2	<3 J	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-5B	152	5/1/2018	TestAmerica, Inc.	<1	2.5	0.54 J	0.49 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-16_25-30	25-30	8/9/2007	SCDHS	<0	2.8	0.6	0.6	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-16	30	7/17/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-16	30	10/12/2015	TestAmerica, Inc.	<1	0.61 J	<1	0.22 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-16	30	1/19/2017	TestAmerica, Inc.	<1	<1	<1	0.53 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.49 BJ
SP-16	30	5/7/2018	TestAmerica, Inc.	<1	<1	<1	0.49 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-16_75-80	75-80	8/9/2007	SCDHS	119	238	190	1,030	<0	<0	<0	<0 J	1.1	<0	0.9	0.7	n/a	<0	1.2	17	<0
SP-16_75-80	75-80	1/17/2008	SCDHS	110	351	196	627	<0	<0	<0	<0 J	1	<0	<0	n/a	<0	n/a	0.9	12	<0
SP-16_75-80	75-80	7/8/2008	SCDHS	21	162	58	131	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	1.8	<0
SP-16_75-80	75-80	1/27/2009	SCDHS	17	157	27	111	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	1	<0
SP-16_75-80	75-80	11/18/2010	SCDHS	11	68	21	36	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	0.7	<0
SP-16_75-80	75-80	9/14/2011	SCDHS	<0	26	9.9	18	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-16_75-80	75-80	12/19/2012	SCDHS	<0	3	1.1	1.1	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-16P	77	7/17/2014	TestAmerica, Inc.	<1	2.9	0.82 J	0.61 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-16P	77	10/12/2015	TestAmerica, Inc.	<1	2.8	0.58 J	0.86 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-16P	77	1/18/2017	TestAmerica, Inc.	<1	1.3	0.39 J	0.55 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.44 BJ
SP-16P	77	5/4/2018	TestAmerica, Inc.	<1	1.7	0.74 J	1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-17_25-30		8/8/2007	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-17	28.9-29.9	10/12/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-17	30	1/23/2017	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
SP-18_25-30	25-30	8/8/2007	SCDHS	<0	<0	<0	<0	n/a	<0	<0	<0	<0	1.7	0.7	0.6	<0	<0 J	<0	<0	<0
SP-18S_25-30	25-30	3/24/2010	SCDHS	<0	n/a	<0	<0	<0	<0	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	n/a
SP-18S	30	10/13/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-18S	30	1/20/2017	TestAmerica, Inc.	<1	<1	<1	0.29 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-18	30	7/17/2014	TestAmerica, Inc.	<1	<1	<1	0.11 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-18	30	5/7/2018	TestAmerica, Inc.	<1	<1	<1	0.38 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-18_75-80	75-80	8/8/2007	SCDHS	144	208	266	1,160	<0	<0	<0	<0 J	1.1	<0	<0	<0	n/a	<0	2.6	19	<0
SP-18_75-80	75-80	1/17/2008	SCDHS	59	186	159	407	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	0.8	9.5	1
SP-18_75-80	75-80	7/8/2008	SCDHS	14	67	43	102	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	1.6	<0
SP-18_75-80	75-80	1/27/2009	SCDHS	26	229	58	172	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	1.4	<0
SP-18_75-80	75-80	3/4/2010	SCDHS	7.1	106	19	19	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-18_75-80	75-80	11/18/2010	SCDHS	5.8	60	14	17	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-18_75-80	75-80	9/14/2011	SCDHS	<0	30	7	6.7	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-18_75-80	75-80	12/19/2012	SCDHS	<0	80	28	32	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-18D	77-78	7/17/2014	TestAmerica, Inc.	0.09 J	7.1	1.1	0.89 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-18D	77-78	10/13/2015	TestAmerica, Inc.	<1	24	2.6	1.3	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-18D	77-78	1/20/2017	TestAmerica, Inc.	<1	10	1.4	0.80 J	<1	<1	<2	<3	<1	<1	<1	<1	0.50 J	<1	<1	<1	<1
SP-18D	77-78	5/4/2018	TestAmerica, Inc.	<1	7.8	1.1	0.81 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-19_25-30	25-30	8/23/2007	SCDHS	<0	0.5	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-19	29-30	7/17/2014	TestAmerica, Inc.	<1	<1	<1	0.12 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-19	29-30	10/13/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-19	29-30	1/23/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.36 BJ
SP-19	29-30	5/4/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-20_25-30	25-30	9/18/2007	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-20	30	7/17/2014	TestAmerica, Inc.	<1	<1	<1														



**ENVIRONMENTAL
ASSESSMENT &
REMEDIATIONS**

Groundwater Sampling Laboratory Analytical Results - Historical Data
Suffolk County Department of Health (SCDHS), Method Unknown
TestAmerica Laboratories, Inc., EPA Method 8260C
VOCs (ug/L)

Location	Depth	Date Collected	Lab	Carbon Tetrachloride	Tetrachloroethene	Trichloroethylene	Chloroform	MTBE	Benzene	Xylenes Total	Total BTEX	1,1 Dichloroethane	1,1,1,2 Tetrachloroethane	1,1,2 Trichloroethane	1,1,2,2 Tetrachloroethane	1,3 Dichlorobenzene	Chlorobenzene	Diethyl ether	Freon 113	Methylene Chloride	
SP-21S	25-30	5/7/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-22_25-30	25-30	9/5/2007	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0	
SP-22S_25-30	25-30	3/24/2010	SCDHS	<0	n/a	<0	<0	<0	<0	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	n/a	
SP-22A	30	7/17/2014	TestAmerica, Inc.	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	
SP-22S	30	10/13/2015	TestAmerica, Inc.	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	
SP-22S	30	1/20/2017	TestAmerica, Inc.	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3	<1	<1	<1	
SP-22S	25-30	5/7/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-22_75-80	75-80	9/5/2007	SCDHS	56	98	167	497	<0	<0	<0	<0 J	<0	<0	<0	1.2	<0	n/a	<0	2.4	5.5	
SP-22_75-80	75-80	1/17/2008	SCDHS	31	89	127	173	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0	
SP-22P_75-80	75-80	3/18/2009	SCDHS	38	120	148	191	<0	<0	<0	<0 J	16	<0	<0	n/a	<0	n/a	0.7	2.2	<0	
SP-22P_75-80	75-80	3/4/2010	SCDHS	34	74	78	148	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	0.6	1.8	<0	
SP-22P_75-80	75-80	11/22/2010	SCDHS	61	194	322	209	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	1	<0	<0	
SP-22P	80	7/17/2014	TestAmerica, Inc.	0.43 J	14	9.7	2.3	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-22P	80	10/13/2015	TestAmerica, Inc.	0.45 J	82	19	1.4	0.15 J	<1	<2	<3	<1	<1	0.21 J	<1	<1	<1	<1	<1	<1	
SP-22P	80	1/20/2017	TestAmerica, Inc.	2.3	520	120	11	<1	<1	<2	<3	<1	0.54 J	1.5	0.39 J	<1	<1	0.13 J	<1	<1	
SP-22P	80	4/26/2018	TestAmerica, Inc.	<1	26	6.2	1.2	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-23_25-30	25-30	9/17/2007	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0	
SP-23	28.18-29.18	7/11/2014	TestAmerica, Inc.	<1	<1	<1	1.2	<1	<1	<2	<3	<1	<1	<1	<1	0.14 J	<1	<1	<1	<1	
SP-23	28.18-29.18	10/8/2015	TestAmerica, Inc.	16	24	25	120	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	0.37 J	1.9	<1	
SP-23	28.18-29.18	1/19/2017	TestAmerica, Inc.	<1	<1	<1	0.46 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.36 BJ	
SP-23	28.18-29.18	5/4/2018	TestAmerica, Inc.	<1	<1	<1	3.2	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-23_85-90	85-90	9/5/2007	SCDHS	52	37	66	360	<0	<0	<0	<0 J	0.6	<0	<0	<0	n/a	<0	0.9	14	<0	
SP-23_95-100	95-100	9/5/2007	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0	
SP-23_95-100	95-100	1/17/2008	SCDHS	89	68	126	658	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	21	<0	
SP-23P_85-90	85-90	1/27/2009	SCDHS	87	62	87	581	<0	<0	<0	<0 J	0.6	<0	<0	n/a	<0	n/a	0.8	17	<0	
SP-23P_85-90	85-90	11/18/2010	SCDHS	82	77	104	471	<0	<0	<0	<0 J	0.5	<0	<0	n/a	<0	n/a	0.7	20	<0	
SP-23P_85-90	85-90	9/14/2011	SCDHS	<0	52	65	321	<0	<0	<0	<0 J	6.5	<0	<0	n/a	<0	n/a	<0	11	<0	
SP-23P	85-90	1/20/2017	TestAmerica, Inc.	16	24	26	140	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	0.32 J	1.9	0.26 J	
SP-23P	85-90	5/4/2018	TestAmerica, Inc.	19	28	30	140	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	0.40 J	1.8	<1	
SP-24_75-80	75-80	10/2/2007	SCDHS	<0	<0	<0	0.7	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0	
SP-24	80	7/15/2014	TestAmerica, Inc.	0.57 J	2.7	0.62 J	8.3	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-24	80	10/8/2015	TestAmerica, Inc.	<1	1.9	0.53 J	3.3	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-24	80	1/19/2017	TestAmerica, Inc.	2.5	15	4.4	18	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-24	80	5/4/2018	TestAmerica, Inc.	5.3	25	13	29	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	0.46 J	<1	
SP-25	25	7/11/2014	TestAmerica, Inc.	<1	<1	<1	0.23 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-25	25	10/14/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-25	25	1/23/2017	TestAmerica, Inc.	<1	<1	<1	0.27 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.33 BJ	
SP-25	25	5/4/2018	TestAmerica, Inc.	<1	<1	<1	0.31 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-26_75-80	75-80	10/1/2007	SCDHS	<0	<0	<0	3.4	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0	
SP-26P_75-80	75-80	3/16/2009	SCDHS	<0	<0	0.7	7.9	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0	
SP-26P_75-80	75-80	11/24/2010	SCDHS	<0	<0	0.6	2.6	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0	
SP-26P_75-80	75-80	7/13/2011	SCDHS	<0	0.6	1.4	6.9	0.5	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0	
SP-26P_75-80	75-80	12/26/2012	SCDHS	<0	1.5	3.1	4.4	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0	
SP-26	80	7/15/2014	TestAmerica, Inc.	2.2	3.5	4.1	17	0.30 J	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	0.26 J	<1	
SP-26P	80	10/13/2015	TestAmerica, Inc.	<1	0.67 J	0.52 J	1.8	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-26P	80	1/24/2017	TestAmerica, Inc.	<1	0.90 J	0.60 J	0.59 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-26P	80	5/8/2018	TestAmerica, Inc.	0.51 J	2.8	2.7	3.4	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-27_65-70	65-70	10/3/2007	SCDHS	<0	<0	<0	0.5	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0	
SP-27	70	7/17/2014	TestAmerica, Inc.	<1	1.7	0.31 J	0.44 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-27	70	10/12/2015	TestAmerica, Inc.	<1	0.82 J	<1	1.1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-27	70	1/18/2017	TestAmerica, Inc.	<1	0.40 J	<1	0.47 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.39 BJ	
SP-27	70	5/4/2018	TestAmerica, Inc.	<1	6	0.86 J	0.82 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-28_25-30	25-30	12/12/2007	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0	
SP-28	30	7/17/2014	TestAmerica, Inc.	<1	0.10 J	<1	0.20 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-28	30	10/12/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-28	30	1/18/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.34 BJ	
SP-28	30	5/4/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-29	25	7/17/2014	TestAmerica, Inc.	<1	<1	<1	0.43 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-29	25	10/13/2015	TestAmerica, Inc.	<1	<1	<1	1.4	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-29	25	1/23/2017	-										DRY								
SP-29	25	5/7/2018	TestAmerica, Inc.	<1	<1	<1	0.71 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-30	30	7/17/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-30	30	10/13/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-30	30	1/23/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.37 BJ	
SP-30	30	5/7/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1	
SP-31_25-30	25-30	12/19/2007	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0	
SP-31	30	7/14/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1									

Table 6



Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185

Groundwater Sampling Laboratory Analytical Results - Historical Data
Suffolk County Department of Health (SCDHS), Method Unkown
TestAmerica Laboratories, Inc., EPA Method 8260C
VOCs (ug/L)

Location	Depth	Date Collected	Lab	Carbon Tetrachloride	Tetrachloroethene	Trichloroethylene	Chloroform	MTBE	Benzene	Xylenes Total	Total BTEX	1,1 Dichloroethane	1,1,1,2 Tetrachloroethane	1,1,2 Trichloroethane	1,1,2,2 Tetrachloroethane	1,3 Dichlorobenzene	Chlorobenzene	Diethyl ether	Freon 113	Methylene Chloride
SP-34P_70-75	70-75	3/16/2009	SCDHS	<0	<0	<0	0.7	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-34P_70-75	70-75	11/22/2010	SCDHS	<0	<0	<0	0.6	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-34P	75	7/16/2014	TestAmerica, Inc.	<1	0.78 J	<1	0.71 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-34P	75	10/15/2015	TestAmerica, Inc.	<1	0.54 J	0.24 J	0.72 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-34P	75	1/19/2017	TestAmerica, Inc.	<1	0.37 J	<1	0.37 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.36 BJ
SP-34P	75	5/4/2018	TestAmerica, Inc.	<1	1.1	<1	0.57 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-34D_110-115	120.08-125.08	8/21/2008	SCDHS	4.4	<0	1.3	25	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	0.9	<0
SP-34D_110-115	120.08-125.08	1/27/2009	SCDHS	2.3	<0	5	13	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-34D_110-115	120.08-125.08	11/22/2010	SCDHS	16	1	15	89	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	4.7	<0
SP-34D	120.08-121.08	7/16/2014	TestAmerica, Inc.	9.7	9.5	16	79	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	1.6	<1
SP-34D	120.08-121.08	10/15/2015	TestAmerica, Inc.	7.5	13	14	45	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	1.1	<1
SP-34D	120.08-121.08	1/19/2017	TestAmerica, Inc.	11	21	22	89	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	0.28 J	2.1	<1
SP-34D	120.08-121.08	5/4/2018	TestAmerica, Inc.	5.8	29	13	33	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	0.12 J	0.51 J	<1
SP-35_25-30	25-30	3/4/2010	SCDHS	<0	<0	<0	4.9	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-35	30	7/11/2014	TestAmerica, Inc.	<1	<1	<1	0.18 J	<1	<1	<2	<3	<1	0.47 J	<1	<1	<1	<1	<1	<1	<1
SP-35	30	10/15/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-35	30	1/23/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.36 BJ
SP-35	30	5/4/2018	TestAmerica, Inc.	<1	<1	<1	0.35 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-35P_75-80	75-80	5/15/2008	SCDHS	11	5.1	28	167	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	0.6	4.1	<0
SP-35P_75-80	75-80	3/16/2009	SCDHS	<0	2.3	2.7	1.7	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-35P_75-80	75-80	3/4/2010	SCDHS	2.2	9.7	17	21	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-35P_75-80	75-80	11/23/2010	SCDHS	<0	2.5	2.7	1.6	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-35P_75-80	75-80	9/15/2011	SCDHS	<0	2.2	3.3	2.5	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-35P_75-80	75-80	1/8/2013	SCDHS	<0	7.9	5.6	1.1	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-35P	80	7/11/2014	TestAmerica, Inc.	9.9	200	280	91	<1	<1	<2	<3	0.16 J	0.25 J	6.6	0.38 J	<1	<1	1.6	<1	<1
SP-35P	80	10/15/2015	TestAmerica, Inc.	0.91 J	130	51	5.5	<1	<1	<2	<3	<1	<1	0.57 J	<1	<1	<1	0.15 J	<1	<1
SP-35P	80	1/23/2017	TestAmerica, Inc.	8.6	380	350	120	<1	<1	<2	<3	<1	0.60 J	4	0.38 J	<1	0.30 J	2.5	<1	0.77 J
SP-35P	80	5/7/2018	TestAmerica, Inc.	0.35 J	110	22	3.6	<1	<1	<2	<3	<1	<1	0.56 J	<1	<1	<1	<1	<1	<1
SP-36_25-30	25-30	5/6/2008	SCDHS	<0	0.9	0.8	0.8	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-36	30	7/11/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-36	30	10/14/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-36	30	1/23/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.34 BJ
SP-36	30	5/7/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-37_25-30	25-30	5/13/2008	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-37	30	7/14/2014	TestAmerica, Inc.	<1	<1	<1	0.64 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-37	30	10/14/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-37	30	1/30/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	0.42 J	<1	<1	<1	<1
SP-37	30	5/7/2018	TestAmerica, Inc.	<1	<1	<1	0.25 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-39_25-30	25-30	7/9/2008	SCDHS	<0	<0	<0	1.1	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-39	30	7/16/2014	TestAmerica, Inc.	<1	<1	<1	0.25 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-39	30	10/9/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-39	30	1/30/2017	TestAmerica, Inc.	<1	<1	<1	0.27 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-39	30	5/9/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.31 BJ
SP-40_15-20	15-20	7/10/2008	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-40_15-20	15-20	8/1/2012	SCDHS	<0	<0	<0	0.8	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-40	20	7/16/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-40	20	10/9/2015	TestAmerica, Inc.	<1	<1	<1	0.31 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-40	20	1/30/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-40	20	5/9/2018	TestAmerica, Inc.	<1	<1	<1	0.24 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.25 BJ
SP-41_25-30	25-30	8/5/2008	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-41	30	7/14/2014	TestAmerica, Inc.	<1	<1	<1	0.49 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-41	30	10/9/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-41	30	1/24/2017	TestAmerica, Inc.	<1	<1	<1	0.93 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-41	30	5/8/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-42_25-30	25-30	7/16/2008	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-42	30	7/14/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-42	30	10/14/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-42	30	1/24/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-42	30	5/8/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-43_25-30	25-30	7/22/2008	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-43	30	7/14/2014	TestAmerica, Inc.	<1	<1	<1	0.12 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-43	30	10/14/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-43	30	1/23/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.31 BJ
SP-43	30	5/4/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-44P_65-70	65-70	3/16/2009	SCDHS	<0	<0	<0	0.6	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-44P_65-70</																				

Table 6



Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185

Groundwater Sampling Laboratory Analytical Results - Historical Data
Suffolk County Department of Health (SCDHS), Method Unkown
TestAmerica Laboratories, Inc., EPA Method 8260C
VOCs (ug/L)

Location	Depth	Date Collected	Lab	Carbon Tetrachloride	Tetrachloroethene	Trichloroethylene	Chloroform	MTBE	Benzene	Xylenes Total	Total BTEX	1,1 Dichloroethane	1,1,1,2 Tetrachloroethane	1,1,2 Trichloroethane	1,1,2,2 Tetrachloroethane	1,3 Dichlorobenzene	Chlorobenzene	Diethyl ether	Freon 113	Methylene Chloride
SP-45	70	1/19/2017	TestAmerica, Inc.	<1	<1	<1	1.2	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.41 BJ
SP-45	70	5/8/2018	TestAmerica, Inc.	<1	<1	<1	0.85 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-46_25-30	25-30	7/31/2008	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-46	30	7/11/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	0.15 J	<1	<1	<1	<1
SP-46	30	10/8/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-46	30	1/19/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-46	30	5/8/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-47_25-30	25-30	8/4/2008	SCDHS	<0	<0	<0	1.2	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-47	30	7/16/2014	TestAmerica, Inc.	<1	<1	<1	0.15 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-47	30	10/9/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-47	30	1/30/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	0.53 J	<1	<1	<1	<1
SP-47	30	5/9/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.25 J
SP-48P_70-75	70-75	3/16/2009	SCDHS	<0	<0	<0	0.7	1.1	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-48P_70-75	70-75	1/9/2013	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-48P^	75	7/16/2014	TestAmerica, Inc.	<1	<1	<1	0.43 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-48P^	75	10/9/2015	TestAmerica, Inc.	<1	<1	<1	0.22 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-48P^	75	1/30/2017	TestAmerica, Inc.	<1	<1	<1	0.78 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-48P	75	4/27/2018	TestAmerica, Inc.	<1	<1	<1	0.43 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-48_110-115	110-115	1/29/2008	SCDHS	<0	<0	<0	0.6	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-48_110-115	110-115	8/20/2008	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-48_110-115	110-115	1/9/2013	SCDHS	<0	<0	<0	21	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-48^	123	7/16/2014	TestAmerica, Inc.	3.4	<1	0.38 J	150	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	1.2	2.8	0.28 J
SP-48^	123	10/9/2015	TestAmerica, Inc.	10	<1	4.1	210	<1	<1	<2	<3	<1	<1	0.26 J	<1	<1	<1	1.1	3.6	<1
SP-48^	123	1/30/2017	TestAmerica, Inc.	23	<1	32	470	<1	<1	<2	<3	<1	<1	0.76 J	<1	<1	<1	2.4	7.2	<1
SP-48	123	5/9/2018	TestAmerica, Inc.	21	1	50	290	<1	<1	<2	<3	<1	<1	0.61 J	<1	<1	<1	1.1	3.5	0.32 J
SP-49	90	7/14/2014	TestAmerica, Inc.	<1	0.24 J	0.13 J	0.76 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-49	90	10/14/2015	TestAmerica, Inc.	<1	<1	<1	0.43 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-49	90	1/24/2017	TestAmerica, Inc.	<1	<1	<1	0.30 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-49	90	5/8/2018	TestAmerica, Inc.	<1	<1	<1	0.26 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-50MA_25-35	25-35	1/21/2009	SCDHS	<0	1.6	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-50A	37	7/22/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-50A	37	5/16/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-50M_75-80	75-80	1/21/2009	SCDHS	1.5	255	59	39	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-50M_75-80	75-80	11/17/2010	SCDHS	0.7	200	22	14	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-50M_75-80	75-80	9/28/2011	SCDHS	<0	151	20	24	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-50	87	7/22/2014	TestAmerica, Inc.	0.49 J	61	12	19	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-50M	87	10/19/2015	TestAmerica, Inc.	0.71 J	70	18	27	<1	<1	<2	<3	<1	<1	0.15 J	<1	<1	<1	<1	<1	<1
SP-50M	87	2/3/2017	TestAmerica, Inc.	<1	240	8.7	4.1	<1	<1	<2	<3	<1	0.49 J	<1	0.33 J	<1	<1	<1	<1	<1
SP-50M	87	4/30/2018	TestAmerica, Inc.	<1	280	5.2	2.1	<1	<1	<2	<3	<1	0.66 J	<1	0.47 J	<1	<1	<1	<1	<1
SP-52A	36	7/22/2014	TestAmerica, Inc.	<1	<1	<1	0.24 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-52A	36	10/20/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-52A	36	2/6/2017	TestAmerica, Inc.	<1	<1	<1	0.42 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-52A	36	5/16/2018	TestAmerica, Inc.	<1	<1	<1	0.78 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-52M_65-70	65-70	1/21/2009	SCDHS	<0	2.3	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-52M_65-70	65-70	11/18/2010	SCDHS	<0	2.1	<0	0.8	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-52M_65-70	65-70	9/28/2011	SCDHS	<0	1.7	<0	1.1	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-52M_65-70	65-70	1/15/2013	SCDHS	<0	<0	<0	0.8	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-52M	75	7/22/2014	TestAmerica, Inc.	<1	0.22 J	<1	0.54 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-52M	75	10/20/2015	TestAmerica, Inc.	<1	<1	<1	0.56 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-52M	75	2/6/2017	TestAmerica, Inc.	<1	1.3	0.23 J	0.50 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-52M	75	5/16/2018	TestAmerica, Inc.	<1	0.33 J	<1	0.51 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-53_30-35	30-35	3/25/2009	SCDHS	<0	2.7	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-53	40	7/23/2014	TestAmerica, Inc.	<1	<1	<1	0.30 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-53	40	10/19/2015	TestAmerica, Inc.	<1	<1	<1	0.23 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-53	40	2/3/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-53	40	5/15/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-54_2in	40	7/23/2014	TestAmerica, Inc.	<1	<1	<1	0.71 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-54_2in	40	10/19/2015	TestAmerica, Inc.	<1	<1	<1	0.36 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-54_2in	40	2/3/2017	TestAmerica, Inc.	<1	<1	<1	0.61 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-54_2in	40	5/15/2018	TestAmerica, Inc.	<1	<1	<1	0.93 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-54_.75in	70	7/23/2014	TestAmerica, Inc.	<1	<1	<1	0.57 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-54_.75in	70	10/19/2015	TestAmerica, Inc.	<1	<1	<1	0.49 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-54_.75in	70	2/3/2017	TestAmerica, Inc.	<1	0.37 J	<1	0.62 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-54_.75in	70	5/15/2018	TestAmerica, Inc.	<1	1.4	<1	0.50 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-55_40-45	40-45	5/13/2009	SCDHS	<0	<0	<0	1	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-55	40	7/23/2014	TestAmerica, Inc.																	

Table 6



Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185

Groundwater Sampling Laboratory Analytical Results - Historical Data
Suffolk County Department of Health (SCDHS), Method Unkown
TestAmerica Laboratories, Inc., EPA Method 8260C
VOCs (ug/L)

Location	Depth	Date Collected	Lab	Carbon Tetrachloride	Tetrachloroethene	Trichloroethylene	Chloroform	MTBE	Benzene	Xylenes Total	Total BTEX	1,1 Dichloroethane	1,1,1,2 Tetrachloroethane	1,1,2 Trichloroethane	1,1,2,2 Tetrachloroethane	1,3 Dichlorobenzene	Chlorobenzene	Diethyl ether	Freon 113	Methylene Chloride
SP-57	40	7/22/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-57	40	10/19/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-57	40	2/3/2017	TestAmerica, Inc.	<1	1.5	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-57	40	5/16/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-61_35-40	35-40	3/11/2010	SCDHS	<0	<0	<0	<0	n/a	<0	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0
SP-61	40	7/23/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-61	40	10/19/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-61	40	2/1/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-61	40	5/11/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-62_25-30	25-30	4/13/2010	SCDHS	<0	<0	<0	4.3	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-62	30	7/29/2014	TestAmerica, Inc.	<1	<1	<1	0.23 J	<1	<1	<2	<3	<1	<1	<1	<1	0.23 J	<1	<1	<1	<1
SP-62	30	5/16/2018	TestAmerica, Inc.	<1	<1	<1	0.25 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63_40-45	40-45	10/14/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-63	40	7/29/2014	TestAmerica, Inc.	<1	<1	<1	0.49 J	<1	<1	<2	<3	<1	<1	<1	<1	0.33 J	<1	<1	<1	<1
SP-63	40	10/19/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63	40	2/2/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3 J	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63	40	5/11/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63A_40-45	40-45	11/23/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-63A	40	7/21/2014	TestAmerica, Inc.	<1	<1	<1	0.15 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63A	40	10/19/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63A	40	2/2/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3 J	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63A	40	5/11/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63B_40-45	40-45	10/28/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-63B	40	7/21/2014	TestAmerica, Inc.	<1	<1	<1	0.13 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63B	40	10/19/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63B	40	2/2/2017	TestAmerica, Inc.	<1	<1	<1	0.66 J	<1	<1	<2	<3 J	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63B	40	5/11/2018	TestAmerica, Inc.	<1	<1	<1	0.34 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63C_40-45	40-45	10/21/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-63C	40	7/22/2014	TestAmerica, Inc.	<1	<1	<1	0.46 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63C	40	10/16/2015	TestAmerica, Inc.	<1	<1	<1	0.31 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63C	40	2/2/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3 J	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-63C	40	5/11/2018	TestAmerica, Inc.	<1	<1	<1	0.51 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-64	40	7/21/2014	TestAmerica, Inc.	<1	<1	<1	1.3	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-64	40	10/19/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-64	40	1/31/2017	TestAmerica, Inc.	<1	<1	<1	1.8	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.28 BJ
SP-64	40	5/14/2018	TestAmerica, Inc.	<1	<1	<1	2.2	<1	<1	<2	<3	<1	<1	<1	<1	0.89 J	<1	<1	<1	<1
SP-66D_100-105	100-105	11/24/2010	SCDHS	0.5	10	1.2	2.2	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-66D	100	7/21/2014	TestAmerica, Inc.	0.22 J	12	1.1	2.1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-66D	100	10/16/2015	TestAmerica, Inc.	<1	9.8	0.70 J	1.7	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-66D	100	1/31/2017	TestAmerica, Inc.	<1	11	0.72 J	1.8	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.22 BJ
SP-66D	100	4/26/2018	TestAmerica, Inc.	<1	8.2	0.44 J	1.1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-68_25-30	25-30	4/8/2010	SCDHS	<0	<0	<0	0.6	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-68	30	7/18/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-68	30	10/15/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-68	30	1/31/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.25 BJ
SP-68	30	5/10/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.24 J
SP-69_25-30	25-30	3/11/2010	SCDHS	<0	<0	<0	6.3	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-69	30	7/18/2014	TestAmerica, Inc.	<1	<1	<1	1.4	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-69	30	10/15/2015	TestAmerica, Inc.	<1	<1	<1	0.32 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-69	30	2/1/2017	TestAmerica, Inc.	<1	<1	<1	0.60 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-69	30	5/10/2018	TestAmerica, Inc.	<1	<1	<1	1.4	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.34 J
SP-69D_90-95	90-95	12/6/2010	SCDHS	2.6	8.3	<0	11	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-69D	90	7/18/2014	TestAmerica, Inc.	2.9	130	1.9	6.4	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-69D	90	10/16/2015	TestAmerica, Inc.	1.1	79	1.1	2.2	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-69D	90	2/1/2017	TestAmerica, Inc.	0.51 J	34	0.68 J	1.9	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-69D	90	5/10/2018	TestAmerica, Inc.	<1	17	0.39 J	1.5	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.31 J
SP-70_25-30	25-30	3/25/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-70	30	7/18/2014	TestAmerica, Inc.	<1	<1	<1	0.33 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-70	30	10/16/2015	TestAmerica, Inc.	<1	0.99 J	<1	0.47 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-70	30	2/1/2017	TestAmerica, Inc.	<1	<1	<1	0.80 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-70	30	5/10/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.27 J
SP-71	30.05-31.05	7/11/2014	TestAmerica, Inc.	<1	<1	<1	0.58 J	<1	<1	<2	<3	<1	<1	<1	<1	0.26 J	<1	<1	<1	<1
SP-71	30.05-31.05	10/12/2015	TestAmerica, Inc.	<1	<1	<1	0.94 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-71	30.05-31.05	1/17/2017	TestAmerica, Inc.	<1	<1	<1	0.24 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-71	30.05-31.05	5/4/2018	TestAmerica, Inc.	<1	<1	<1	1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-72	25	5/3/2018	TestAmerica, Inc.	<1	<1	<1														

Table 6



Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185

Groundwater Sampling Laboratory Analytical Results - Historical Data
Suffolk County Department of Health (SCDHS), Method Unknown
TestAmerica Laboratories, Inc., EPA Method 8260C
VOCs (ug/L)

Location	Depth	Date Collected	Lab	Carbon Tetrachloride	Tetrachloroethene	Trichloroethylene	Chloroform	MTBE	Benzene	Xylenes Total	Total BTEX	1,1 Dichloroethane	1,1,1,2 Tetrachloroethane	1,1,1,2 Trichloroethane	1,1,2,2 Tetrachloroethane	1,3 Dichlorobenzene	Chlorobenzene	Diethyl ether	Freon 113	Methylene Chloride
SP-73	30	5/3/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-74_25-30	25-30	3/16/2010	SCDHS	<0	<0	<0	0.7	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-74	30	7/11/2014	TestAmerica, Inc.	<1	<1	<1	0.85 J	<1	<1	<2	<3	<1	<1	<1	<1	0.16 J	<1	<1	<1	<1
SP-74	30	10/13/2015	TestAmerica, Inc.	<1	<1	<1	0.46 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-74	30	1/20/2017	TestAmerica, Inc.	<1	<1	<1	0.29 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-74	30	5/3/2018	TestAmerica, Inc.	<1	<1	<1	0.56 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-74D_100-105	100-105	11/18/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-74D	100	7/15/2014	TestAmerica, Inc.	2	0.25 J	<1	27	<1	<1	<2	<3	0.18 J	<1	<1	<1	<1	<1	0.33 J	<1	<1
SP-74D	100	10/12/2015	TestAmerica, Inc.	7	17	0.59 J	44	<1	<1	<2	<3	0.24 J	<1	<1	<1	<1	<1	0.33 J	<1	<1
SP-74D	100	1/16/2017	TestAmerica, Inc.	4.7	52	1.3	20	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	0.20 J	<1	<1
SP-74D	100	5/3/2018	TestAmerica, Inc.	3.5	48	1.1	12	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	0.15 J	<1	<1
SP-75_25-30	25-30	3/25/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-75	30	7/11/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	0.18 J	<1	<1	<1	<1
SP-75	30	10/12/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-75	30	1/16/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-75	30	5/3/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-76_25-30	25-30	3/24/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-76	30	7/11/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	0.17 J	<1	<1	<1	<1
SP-76	30	10/12/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-76	30	1/16/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-76	30	5/3/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-77_25-30	25-30	4/21/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-77	30	7/21/2014	TestAmerica, Inc.	<1	<1	<1	0.10 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-77	30	10/16/2015	TestAmerica, Inc.	<1	<1	<1	0.44 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-77	30	1/31/2017	TestAmerica, Inc.	<1	<1	<1	0.67 J	<1	<1	<2	<3	<1	<1	<1	<1	0.52 J	<1	<1	<1	<1
SP-77	30	5/11/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	0.34 J	<1	<1	<1	<1
SP-77D_100-105	100-105	11/29/2010	SCDHS	<0	<0	<0	1.3	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-77D	100	7/21/2014	TestAmerica, Inc.	0.37 J	5.2	6.6	4.3	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-77D	100	10/16/2015	TestAmerica, Inc.	<1	3.9	4.6	3.5	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-77D	100	1/31/2017	TestAmerica, Inc.	<1	1.9	2.3	2.9	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-77D	100	5/11/2018	TestAmerica, Inc.	<1	1	1.6	2.4	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-78_25-30	25-30	4/22/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-78	30	7/18/2014	TestAmerica, Inc.	<1	<1	<1	0.34 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-78	30	10/16/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-78	30	1/31/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.26 BJ
SP-78	30	5/11/2018	TestAmerica, Inc.	<1	<1	<1	0.23 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-79_25-30	25-30	5/5/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-79	30	7/18/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-79	30	10/16/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-79	30	1/31/2017	TestAmerica, Inc.	<1	<1	<1	0.37 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-79	30	5/11/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-80_25-30	25-30	5/6/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-80	30	7/18/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-80	30	10/16/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-80	30	2/1/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-80	30	5/10/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.31 J
SP-81_70-75	70-75	7/29/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-81	70	7/11/2014	TestAmerica, Inc.	4.7	18	1.2	36	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-81	70	10/7/2015	TestAmerica, Inc.	6.5	26	1.2	42	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-81	70	1/17/2017	TestAmerica, Inc.	6.4	31	1.5	52	<1	0.16 J	0.34 J	0.50 J	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-81	70	4/26/2018	TestAmerica, Inc.	4.1	62	1.9	34	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	0.15 J	<1	<1
SP-82_25-30	25-30	7/29/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-82	25	7/10/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-82	25	10/7/2015	TestAmerica, Inc.	<1	<1	<1	0.32 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-82	25	1/17/2017	TestAmerica, Inc.	<1	<1	<1	0.46 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-82	25	5/3/2018	TestAmerica, Inc.	<1	<1	<1	1.5	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-82M_75-80	75-80	11/23/2010	SCDHS	9.4	7.5	0.9	56	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-82M_75-80	75-80	9/15/2011	SCDHS	12	30	2.2	84	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-82M_75-80	75-80	1/9/2013	SCDHS	<0	14	1	21	<0	<0	<0	<0 J	<0	<0	<0	n/a	<0	n/a	<0	<0	<0
SP-82M	85	7/10/2014	TestAmerica, Inc.	3.3	23	0.91 J	31	<1	<1	<2	<3	<1	<1	0.48 J	<1	<1	<1	<1	<1	<1
SP-82M	85	10/7/2015	TestAmerica, Inc.	1.3	20	0.74 J	11	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-82M	85	1/17/2017	TestAmerica, Inc.	1.2	9.5	0.44 J	12	0.19 J	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-82M	85	5/3/2018	TestAmerica, Inc.	0.74 J	7.8	0.38 J	8.9	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-83_25-30	25-30	8/2/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-83	30	7/10/2014	TestAmerica, Inc.	<1	<1	<1	0.42 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-83	30	10/7/2015	TestAmerica, Inc.	<1	<1	<1	0.25 J	<1	<1	<2	<3	&								

Table 6



Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185

Groundwater Sampling Laboratory Analytical Results - Historical Data
Suffolk County Department of Health (SCDHS), Method Unknown
TestAmerica Laboratories, Inc., EPA Method 8260C
VOCs (ug/L)

Location	Depth	Date Collected	Lab	Carbon Tetrachloride	Tetrachloroethene	Trichloroethylene	Chloroform	MTBE	Benzene	Xylenes Total	Total BTEX	1,1 Dichloroethane	1,1,1,2 Tetrachloroethane	1,1,2 Trichloroethane	1,1,2,2 Tetrachloroethane	1,3 Dichlorobenzene	Chlorobenzene	Diethyl ether	Freon 113	Methylene Chloride
SP-85	30	10/7/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-85	30	1/18/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.35 BJ
SP-85	30	5/4/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-86_15-20	15-20	8/4/2010	SCDHS	<0	<0	<0	<0	n/a	<0	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0
SP-86	19-20	7/10/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-86	19-20	10/7/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-86	19-20	1/18/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.36 BJ
SP-86	19-20	5/3/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-87_5-10	5-10	8/9/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-87	10	7/15/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-87	10	10/12/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-87	10	1/18/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.38 BJ
SP-87	10	5/4/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-88_60-65	60-65	11/17/2010	SCDHS	<0	<0	<0	0.6	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-88	60	7/15/2014	TestAmerica, Inc.	<1	<1	<1	0.24 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-88	60	10/12/2015	TestAmerica, Inc.	<1	<1	<1	0.60 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-88	60	1/16/2017	TestAmerica, Inc.	<1	<1	<1	0.71 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-88	60	5/3/2018	TestAmerica, Inc.	<1	<1	<1	0.42 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-89_30-35	30-35	11/30/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-89	30	7/18/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-89	30	10/16/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-89	30	2/1/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-89	30	5/10/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.26 J
SP-90_40-45	40-45	11/22/2010	SCDHS	<0	<0	<0	1.5	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-90	40	7/11/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-90	40	10/7/2015	TestAmerica, Inc.	<1	<1	<1	0.22 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-90	40	1/17/2017	TestAmerica, Inc.	<1	<1	<1	0.62 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-90	40	5/3/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-91_30-35	30-35	11/24/2010	SCDHS	<0	<0	<0	<0	<0	<0	<0	<0 J	<0	<0	<0	<0	n/a	<0	<0	<0	<0
SP-91	30	7/11/2014	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-91	30	10/7/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-91	30	1/17/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-91	30	5/4/2018	TestAmerica, Inc.	<1	<1	<1	1.2	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-97	15-20	10/8/2015	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-97	15-20	1/18/2017	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.37 BJ
SP-97	15-20	5/4/2018	TestAmerica, Inc.	<1	<1	<1	<1	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-98	25-30	10/8/2015	TestAmerica, Inc.	<1	<1	<1	0.40 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
SP-98	25-30	1/18/2017	TestAmerica, Inc.	<1	<1	<1	4	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.37 BJ
SP-98	25-30	5/4/2018	TestAmerica, Inc.	<1	<1	<1	0.61 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	<1
Garden_DEPT		5/9/2018	TestAmerica, Inc.	<1	<1	<1	0.45 J	<1	<1	<2	<3	<1	<1	<1	<1	<1	<1	<1	<1	0.22 J
NYSDEC TOGS 111 Class GA Standard/Guidance Values			n/a	5	5	5	7	n/a	1	n/a	n/a	5	5	1	5	3	5	n/a	5	5

*The standard applies to each isomer separately
SP-17 was inaccessible/missing during the January 2017 and April 2018 GW sampling Event
**SP-5A was labeled as SP-5M and SP-5M was labeled as SP-5A in the field during the July 2014 and January 2017 GWS event.
^SP-48 was labeled as SP-48D and SP-48D was labeled as SP-48 in the field during the January 2017
"J" value indicates estimated values
"B" the analyte was found in an associated blank, as well as in the sample

Table 7

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185



Suffolk County Department of Health and EAR Well Identification

SCDHS Well ID	EAR Well ID	Notes
SP-1 (70-75)	SP-1	
SP-1M (25-35)	SP-1M	
SP-5M (25-35)	SP-5M	SP-5A was labeled as SP-5M and SP-5M was labeled as SP-5A during the July 2014 and January 2017 sampling event. SP-5A depth is approximately 120-121 ft.bgs.
	SP-5B	No SCDHS well in historical tables with corresponding well depth.
	SP-5A	SP-5A was labeled as SP-5M and SP-5M was labeled as SP-5A during the July 2014 and January 2017 sampling event. No SCDHS Well in historical tables with corresponding well depth of SP-5M.
SP-16 (25-30)	SP-16	
SP-16P	SP-16P	No SCDHS Well in historical tables with corresponding well depth.
SP-18 (25-30)	SP-18	
SP-18 (75-80)	SP-18D	
SP-19 (25-30)	SP-19	
SP-20 (25-30)	SP-20	
SP-21 (25-30)	SP-21	
SP-22 (25-30)	SP-22A	Labeled SP-22S during October 2015 GWS event.
SP-22 (75-80)	SP-22	Labeled SP-22P during October 2015 GWS event.
SP-23 (25-30)	SP-23	
SP-24 (75-80)	SP-24	
SP-25 (20-25)	SP-25	
SP-26P (75-80)	SP-26	
SP-27 (65-70)	SP-27	
SP-28 (25-30)	SP-28	
SP-31 (25-30)	SP-31	
SP-32 (25-30)	SP-32	
SP-34P (70-75)	SP-34P	
SP-34D (110-115)	SP-34D	
SP-35 (25-30)	SP-35	
SP-35P (75-80)	SP-35P	
SP-36 (25-30)	SP-36	
SP-37 (25-30)	SP-37	
SP-39 (25-30)	SP-39	
SP-40 (15-20)	SP-40	
SP-41 (25-30)	SP-41	
SP-42 (25-30)	SP-42	
SP-43 (25-30)	SP-43	
SP-44P (65-70)	SP-44	
SP-45 (25-30)	SP-45	
SP-46 (25-30)	SP-46	
SP-47 (25-30)	SP-47	
SP-48P (70-75)	SP-48P	
SP-48 (110-115)	SP-48	Well depth of SP-48P was 123 feet BGS during sampling event.
SP-50MA (25-35)	SP-50A	
SP-50M (75-80)	SP-50	Well depth of SP-50 was 87 feet BGS during sampling event.
SP-52MA (21-31)	SP-52A	Well depth of SP-52A was 36 feet BGS during sampling event.
SP-52M (65-70)	SP-52 (M)	Well depth of SP-52 was 75 feet BGS during sampling event.
SP-53 (40-45)	SP-53	
SP-54 (40-45)	SP-54 (2in)	
SP-54 (70-75)	SP-54 (.75in)	
SP-55 (40-45)	SP-55	
SP-56 (70-75)	SP-56	
SP-57 (40-45)	SP-57	
SP-61 (35-40)	SP-61	
SP-62 (25-30)	SP-62	
SP-63 (40-45)	SP-63	
SP-63A (40-45)	SP-63A	
SP-63B (40-45)	SP-63B	
SP-63C (40-45)	SP-63C	
SP-66D (100-105)	SP-66D	
SP-68 (25-30)	SP-68	
SP-69 (25-30)	SP-69	
SP-69D (90-95)	SP-69D	

Table 7

Speonk Solvent Plume
 North Phillips Ave.
 Speonk, NY
 Site # 152185



Suffolk County Department of Health and EAR Well Identification

SCDHS Well ID	EAR Well ID	Notes
SP-70 (25-30)	SP-70	
SP-72D (97-102)	SP-72D	
SP-73 (25-30)	SP-73	
SP-74 (25-30)	SP-74	
SP-74D (100-105)	SP-75D	
SP-75 (25-30)	SP-75	
SP-76 (25-30)	SP-76	
SP-77 (25-30)	SP-77	
SP-77D (100-105)	SP-77D	
SP-78 (25-30)	SP-78	
SP-79 (25-30)	SP-79	
SP-80 (25-30)	SP-80	
SP-81 (70-75)	SP-81	
SP-82 (25-30)	SP-82	
SP-82M (75-80)	SP-82M	Well depth of SP-82M was 85 feet BGS during sampling event.
SP-83 (25-30)	SP-83	
SP-84 (25-30)	SP-84	
SP-85 (25-30)	SP-85	
SP-86 (15-20)	SP-86	
SP-87 (5-10)	SP-87	
SP-88 (60-65)	SP-88	
SP-89 (30-35)	SP-89	
SP-90 (40-45)	SP-90	
SP-91 (30-35)	SP-91	

FIGURES



MODIFIED FROM USGS EASTPORT, NY 7.5' QUADRANGLE, 2013

NOT TO SCALE



225 Atlantic Avenue
Patchogue, New York 11772
Tel (631) 447-6400
Fax (631) 447-6497
Email Info@Enviro-Asmnt.com
www.Enviro-Asmnt.com

FIGURE 1 - SITE LOCATION MAP

Speonk Solvent Plume
North Phillips Avenue
NYSDEC Site # 152185

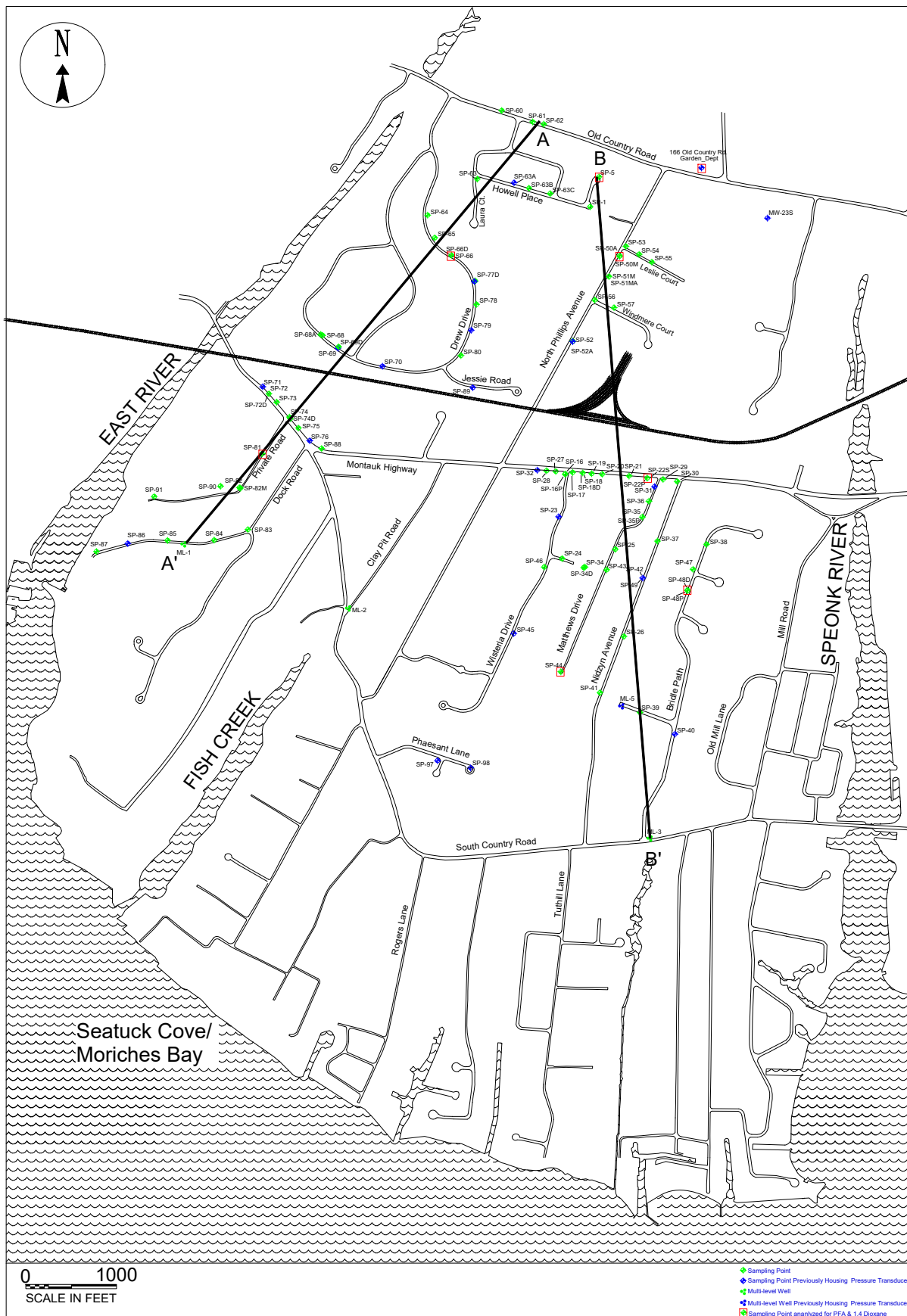


**Figure 2.
Site Map
with Well Locations**

**Speonk Solvent Plume
North Phillips Avenue
Speonk, NY
Site No. 152185**



**ENVIRONMENTAL
ASSESSMENT &
REMEDIATIONS**

Speonk Solvent Plume
North Phillips Avenue
Speonk, NY
Site # 152185
ML-1 Water Level Elevations

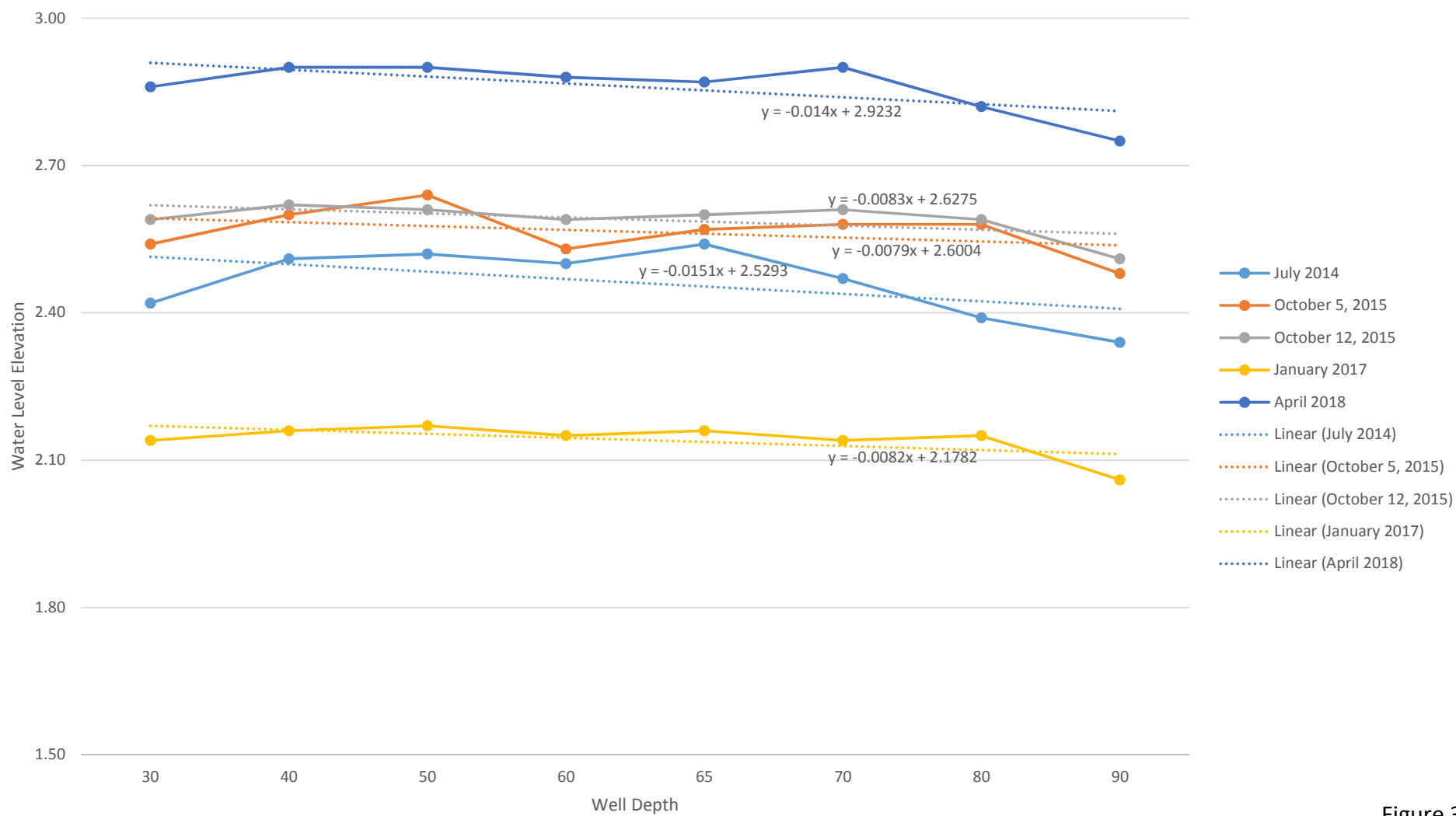


Figure 3

Speonk Solvent Plume
North Phillips Avenue
Speonk, NY
Site # 152185
ML-2 Water Level Elevations

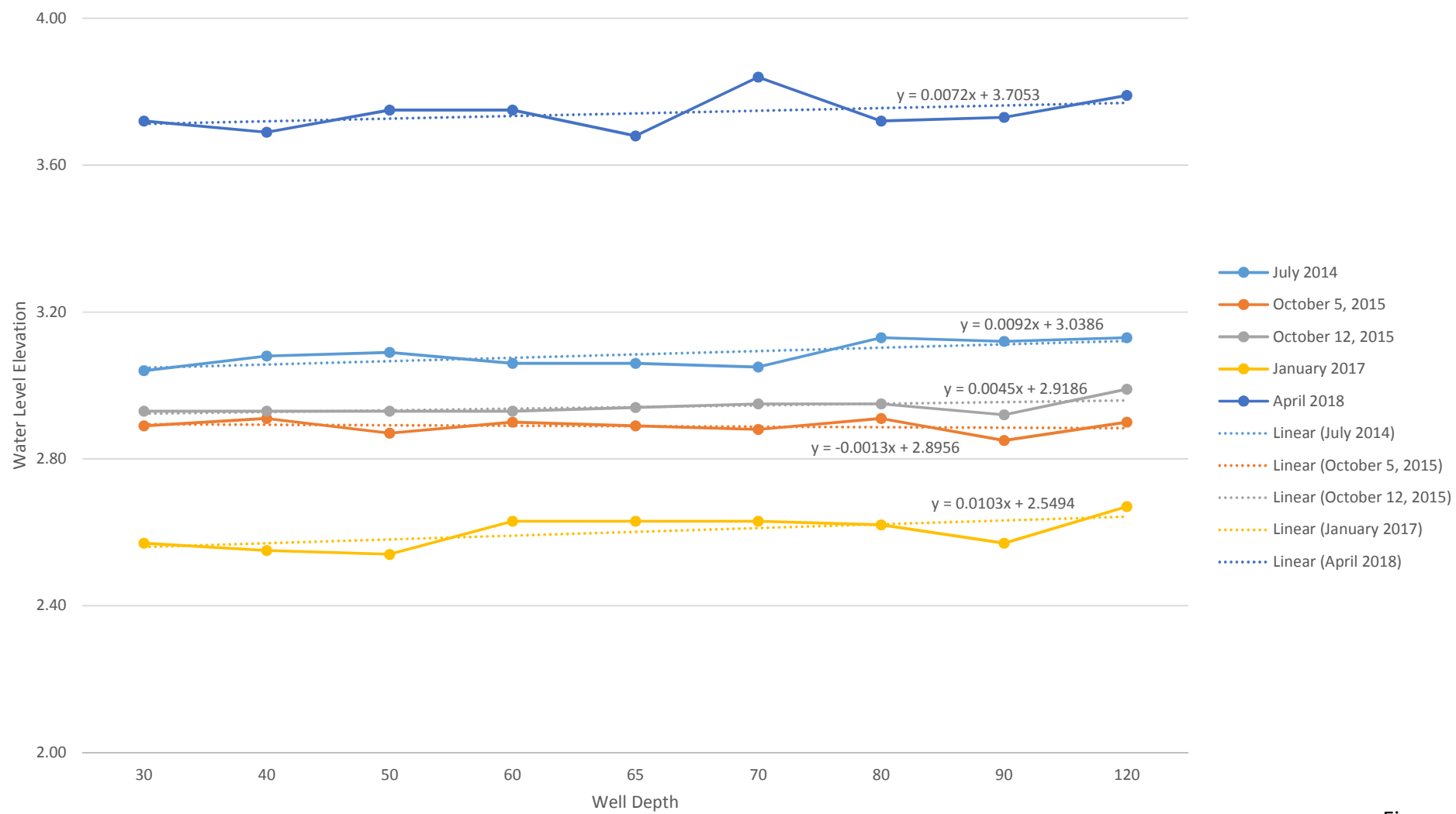


Figure 4

Speonk Solvent Plume
North Phillips Avenue
Speonk, NY
Site # 152185
ML-3 Water Level Elevations

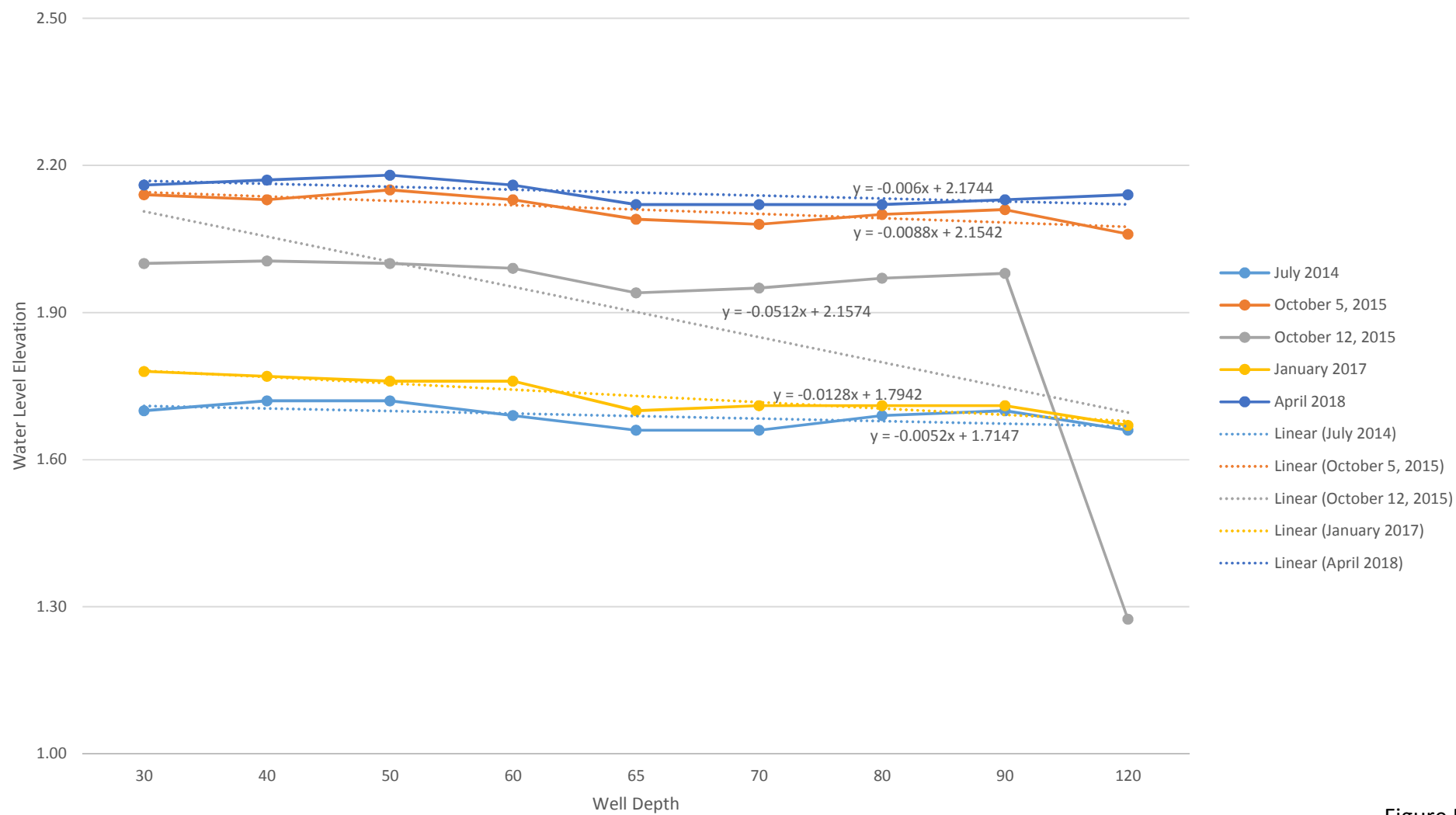


Figure 5

Speonk Solvent Plume
 North Phillips Avenue
 Speonk, NY
 Site # 152185
 ML-5 Water Level Elevations

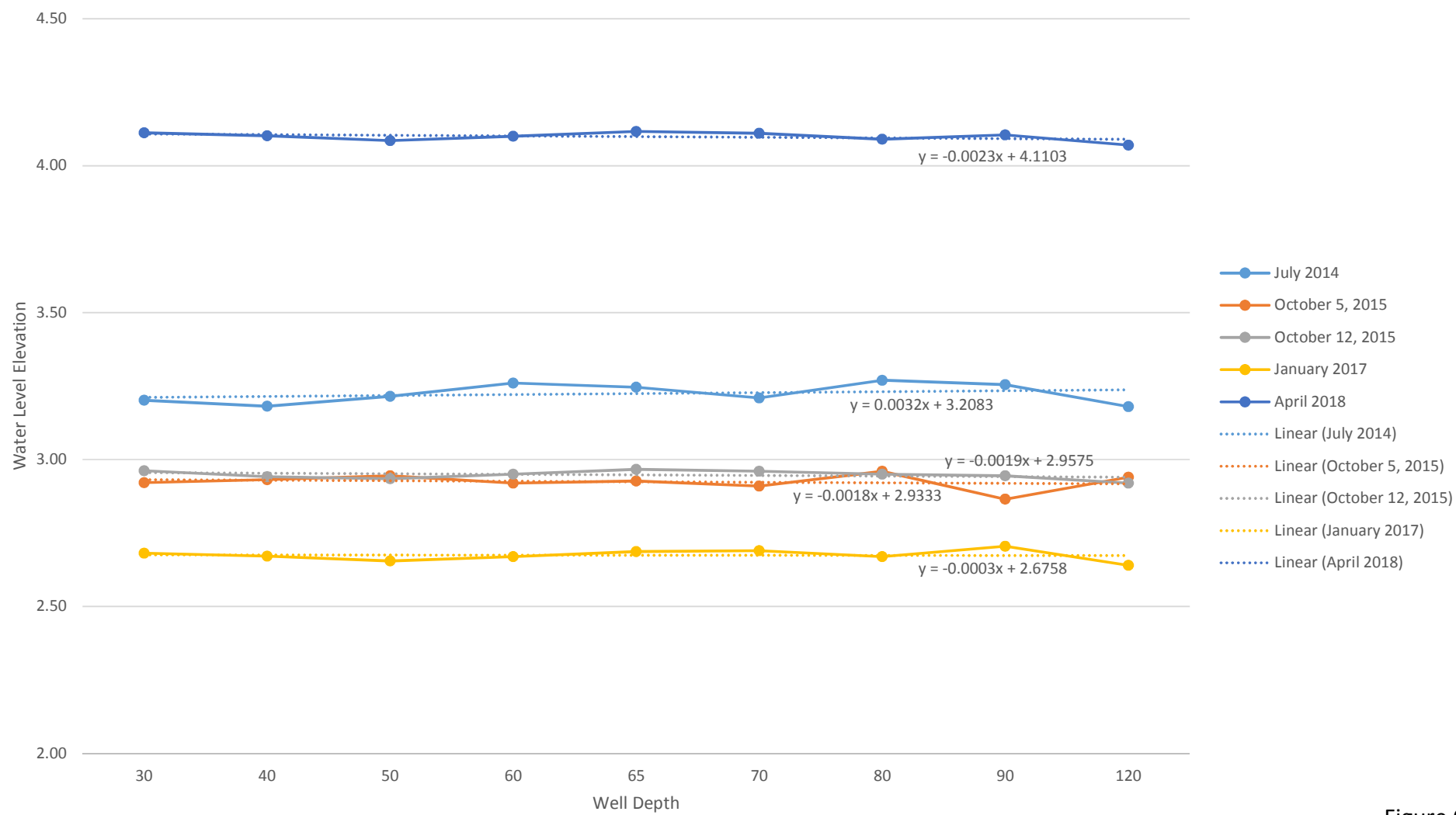
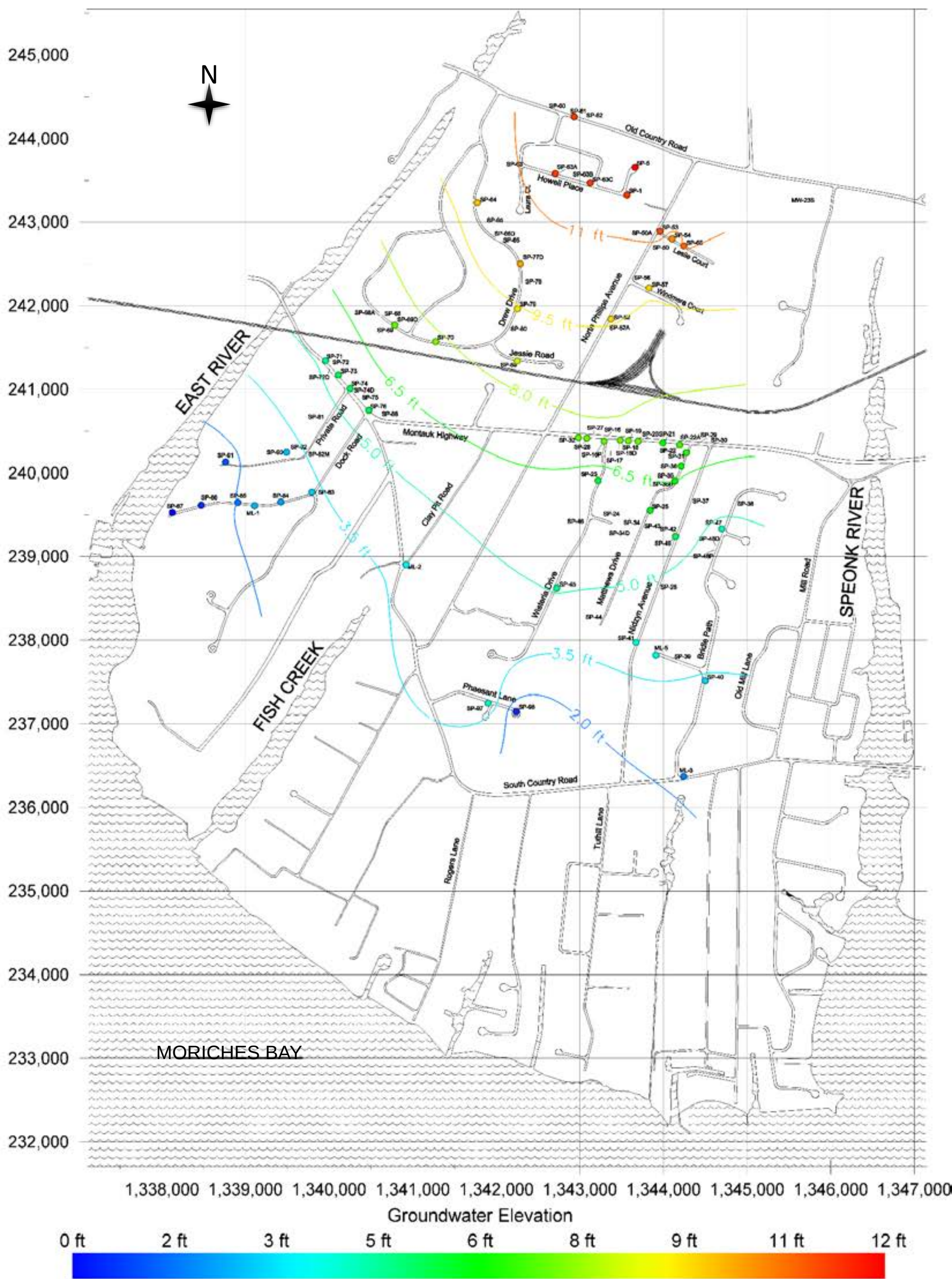


Figure 6

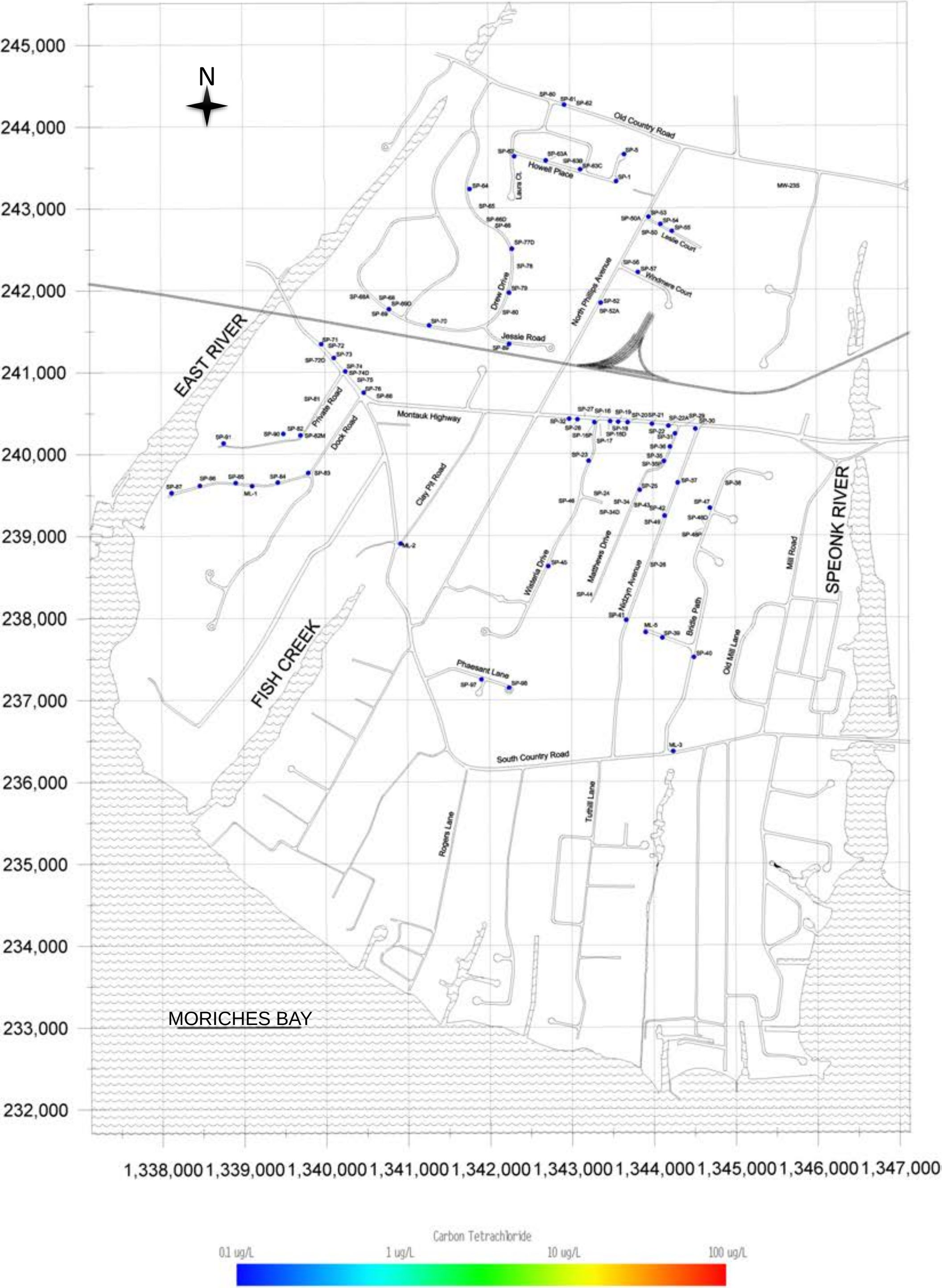
Speonk Solvent Plume
NYSDEC Site No. 152185
Groundwater Elevation Contour Map
(Shallow 40')
Calculated from April 2018 Elevation Data

Figure 7



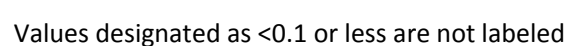
Speonk Solvent Plume
NYSDEC Site No. 152185
Carbon Tetrachloride
Shallow 0-40 Feet Deep
April 2018 (Maximum Concentration Values)

Figure 8



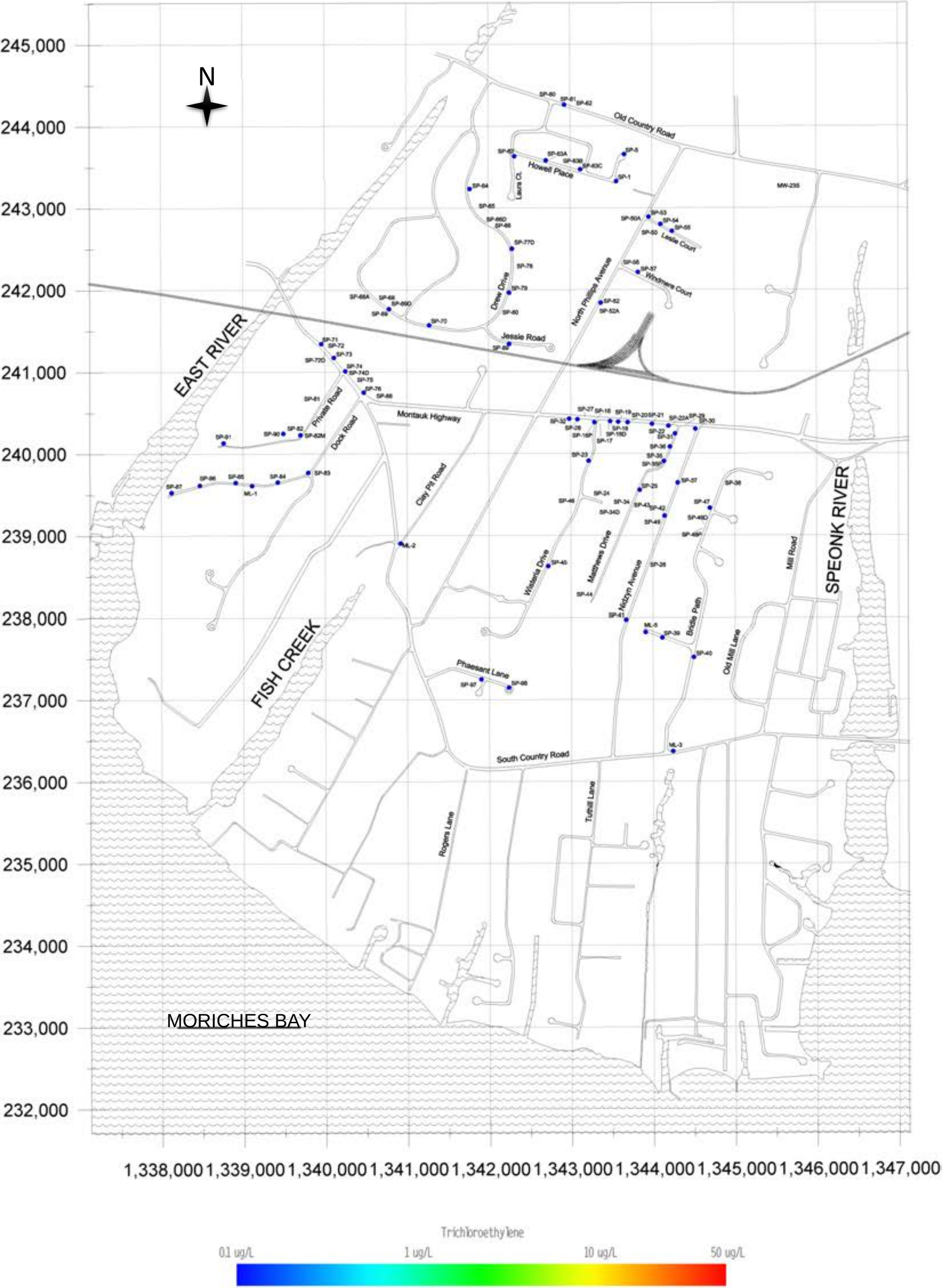
Values designated as <0.1 or less are not labeled

April 2018 (Maximum Concentration Values)



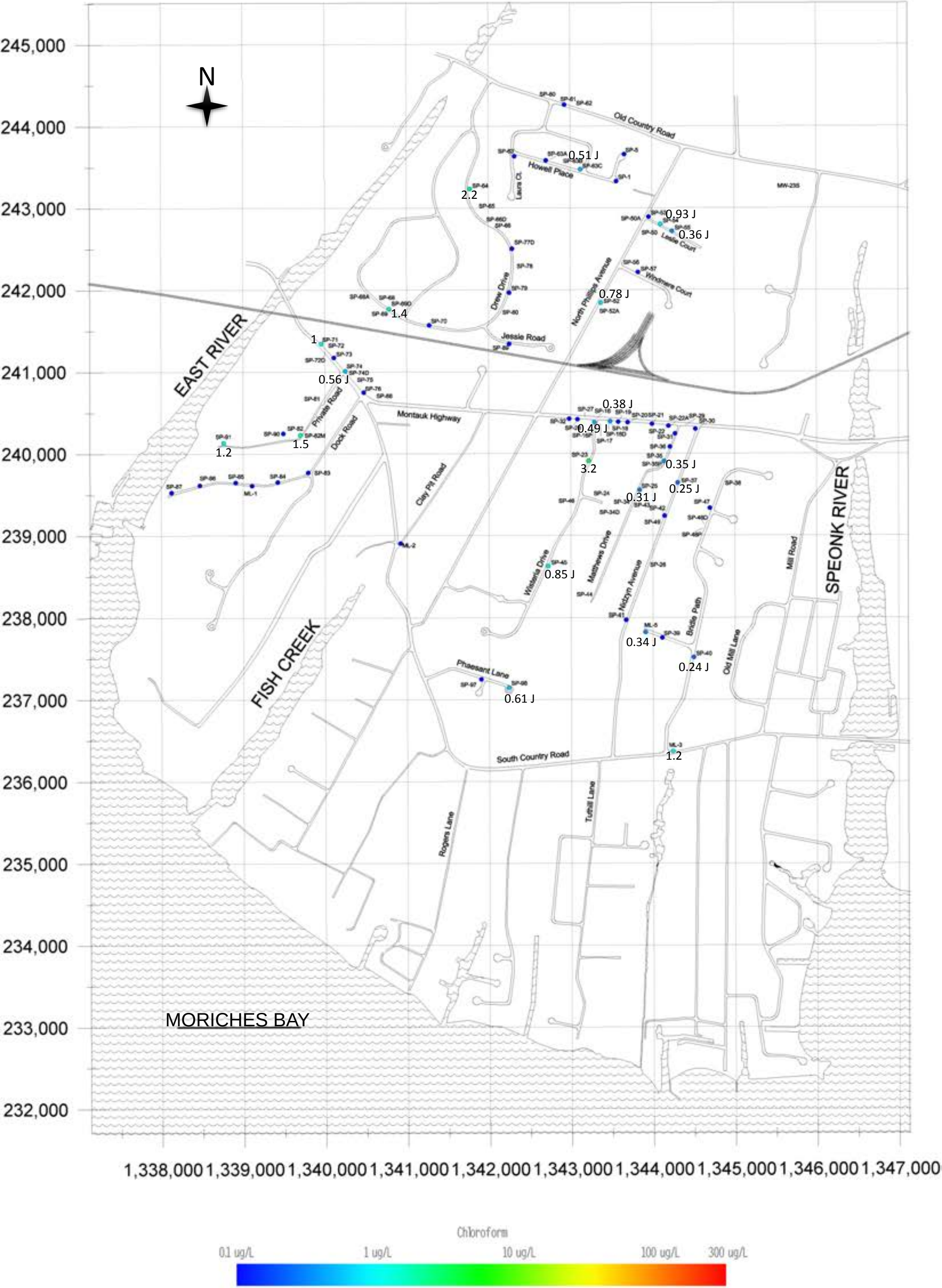
Speonk Solvent Plume
NYSDEC Site No. 152185
Trichloroethylene
Shallow 0-40 Feet Deep
April 2018 (Maximum Concentration Values)

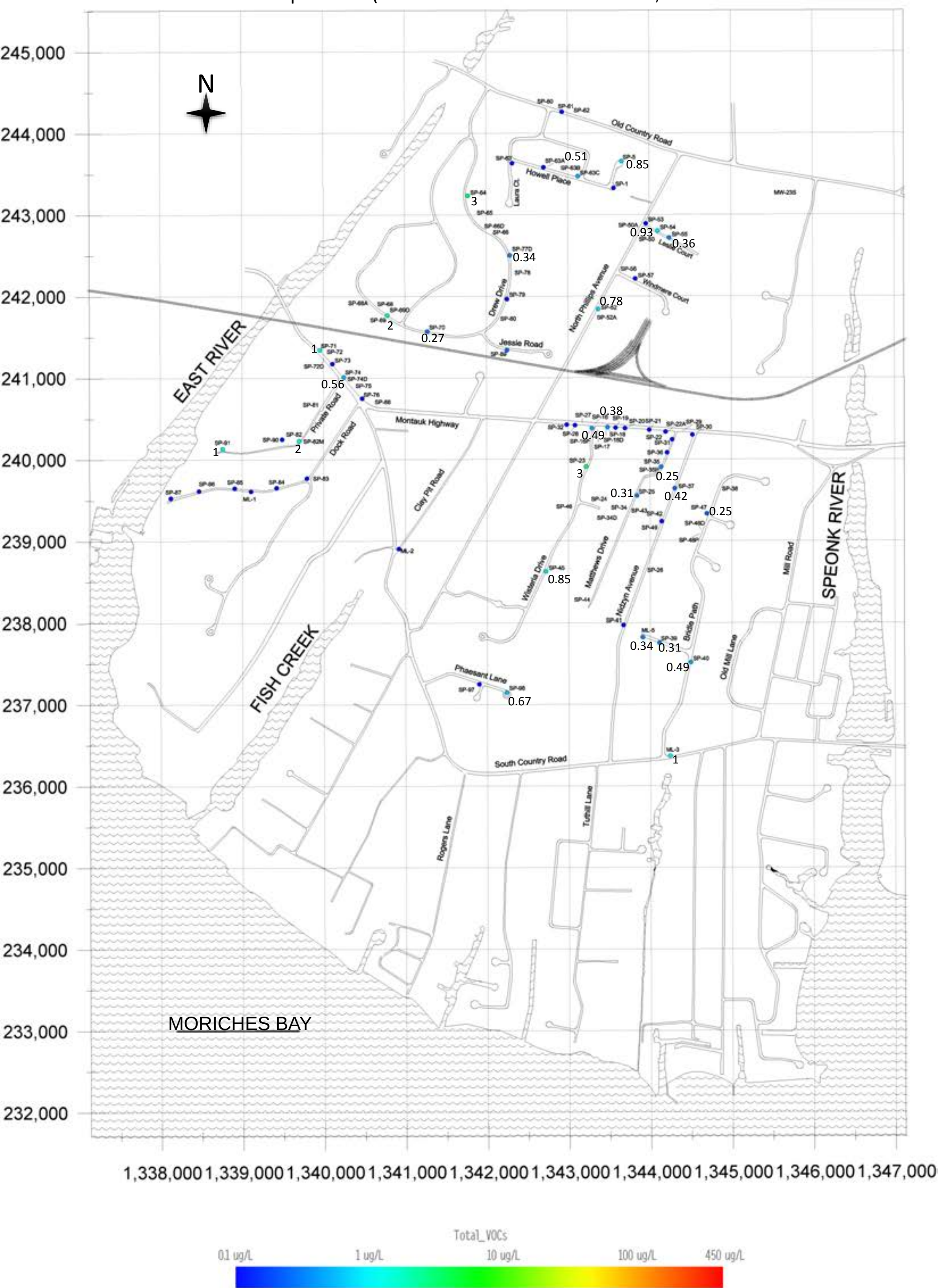
Figure 10



Speonk Solvent Plume
NYSDEC Site No. 152185
Chloroform
Shallow 0-40 Feet Deep
April 2018 (Maximum Concentration Values)

Figure 11

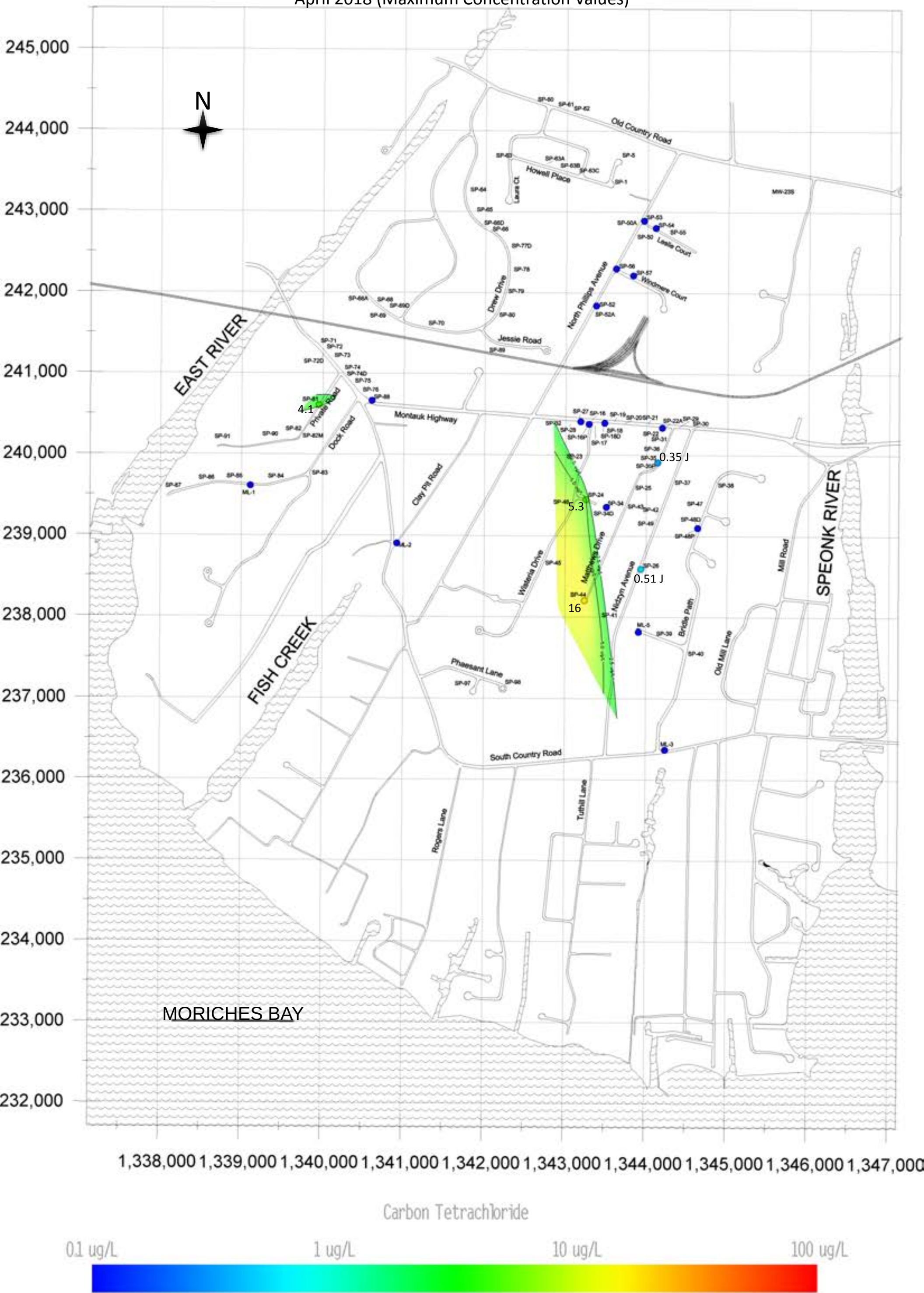




Values designated as <0.1 or less are not labeled

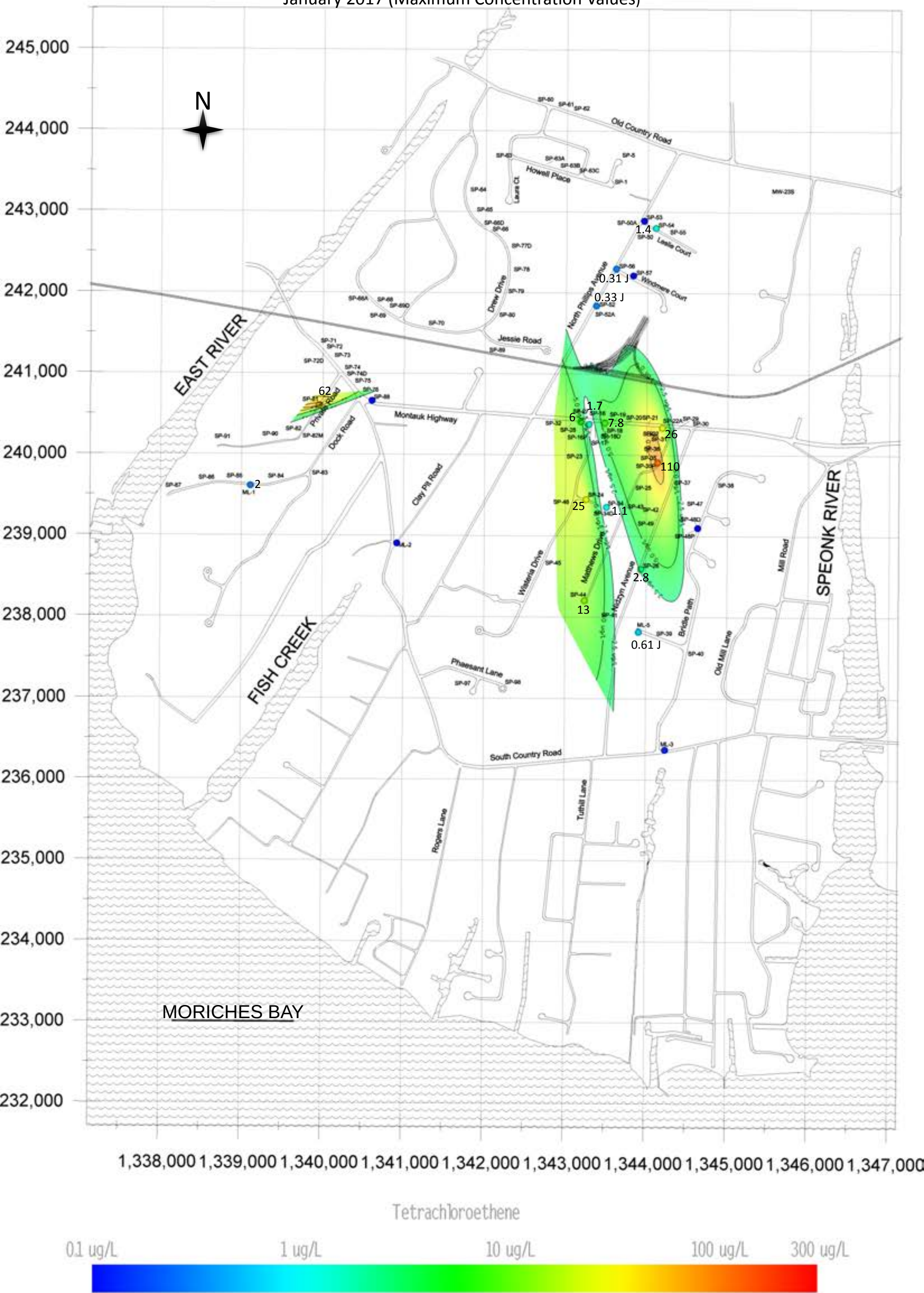
Speonk Solvent Plume
NYSDEC Site No. 152185
Carbon Tetrachloride
Intermediate 40-80 Feet Deep
April 2018 (Maximum Concentration Values)

Figure 13



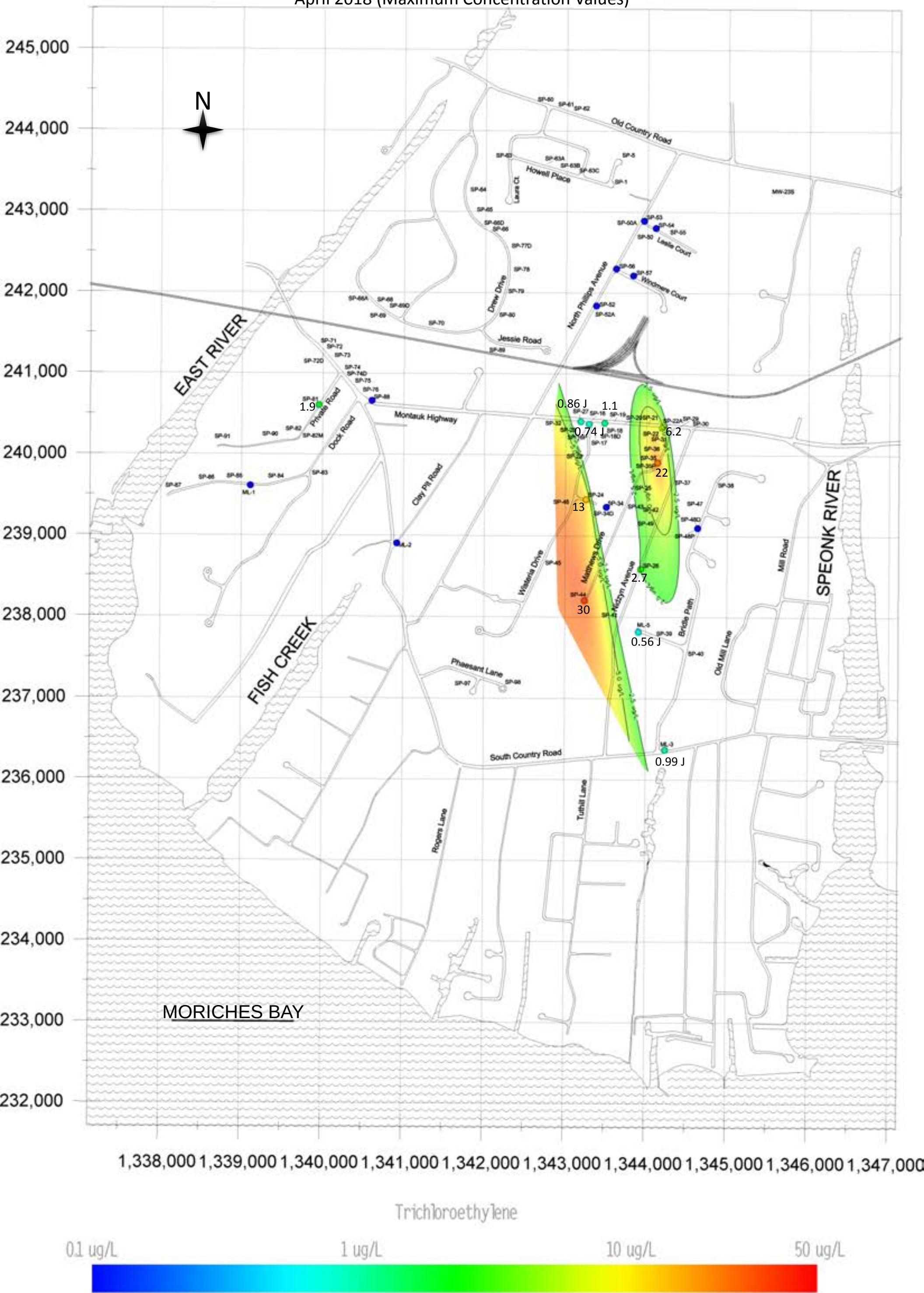
Speonk Solvent Plume
NYSDEC Site No. 152185
Tetrachloroethene
Intermediate 40-80 Feet Deep
January 2017 (Maximum Concentration Values)

Figure 14



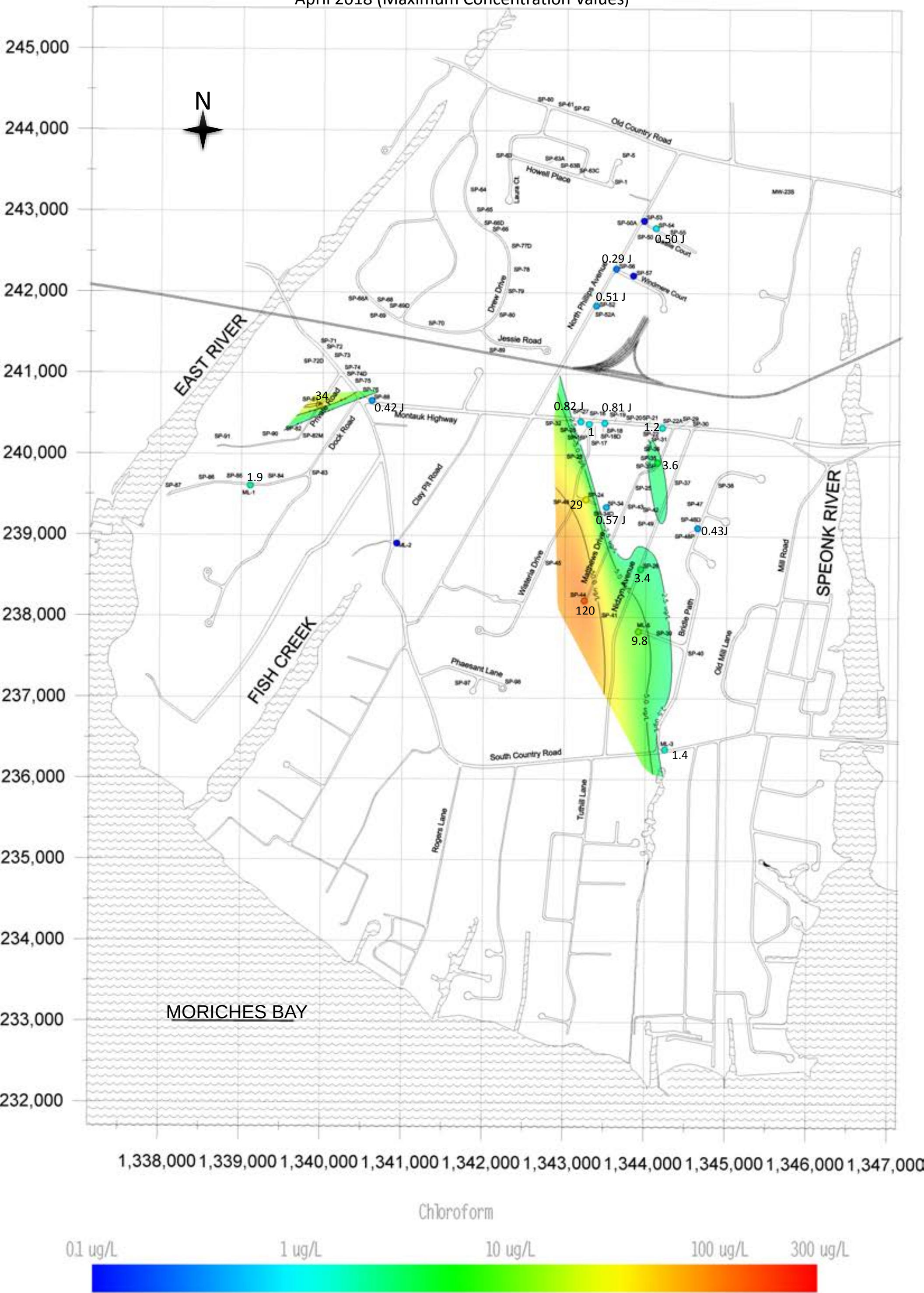
Speonk Solvent Plume
NYSDEC Site No. 152185
Trichloroethylene
Intermediate 40-80 Feet Deep
April 2018 (Maximum Concentration Values)

Figure 15



Speonk Solvent Plume
NYSDEC Site No. 152185
Chloroform
Intermediate 40-80 Feet Deep
April 2018 (Maximum Concentration Values)

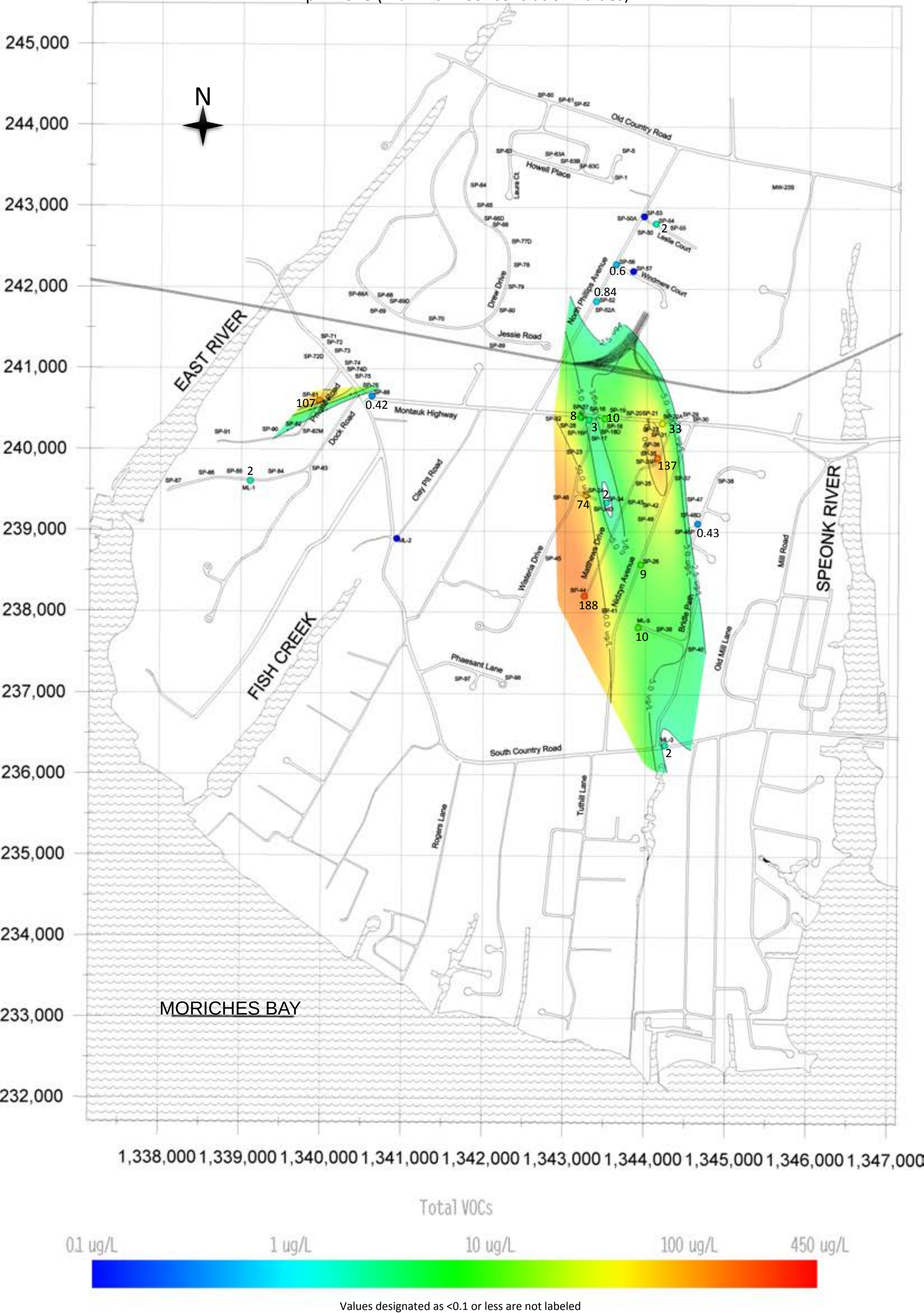
Figure 16



Values designated as <0.1 or less are not labeled

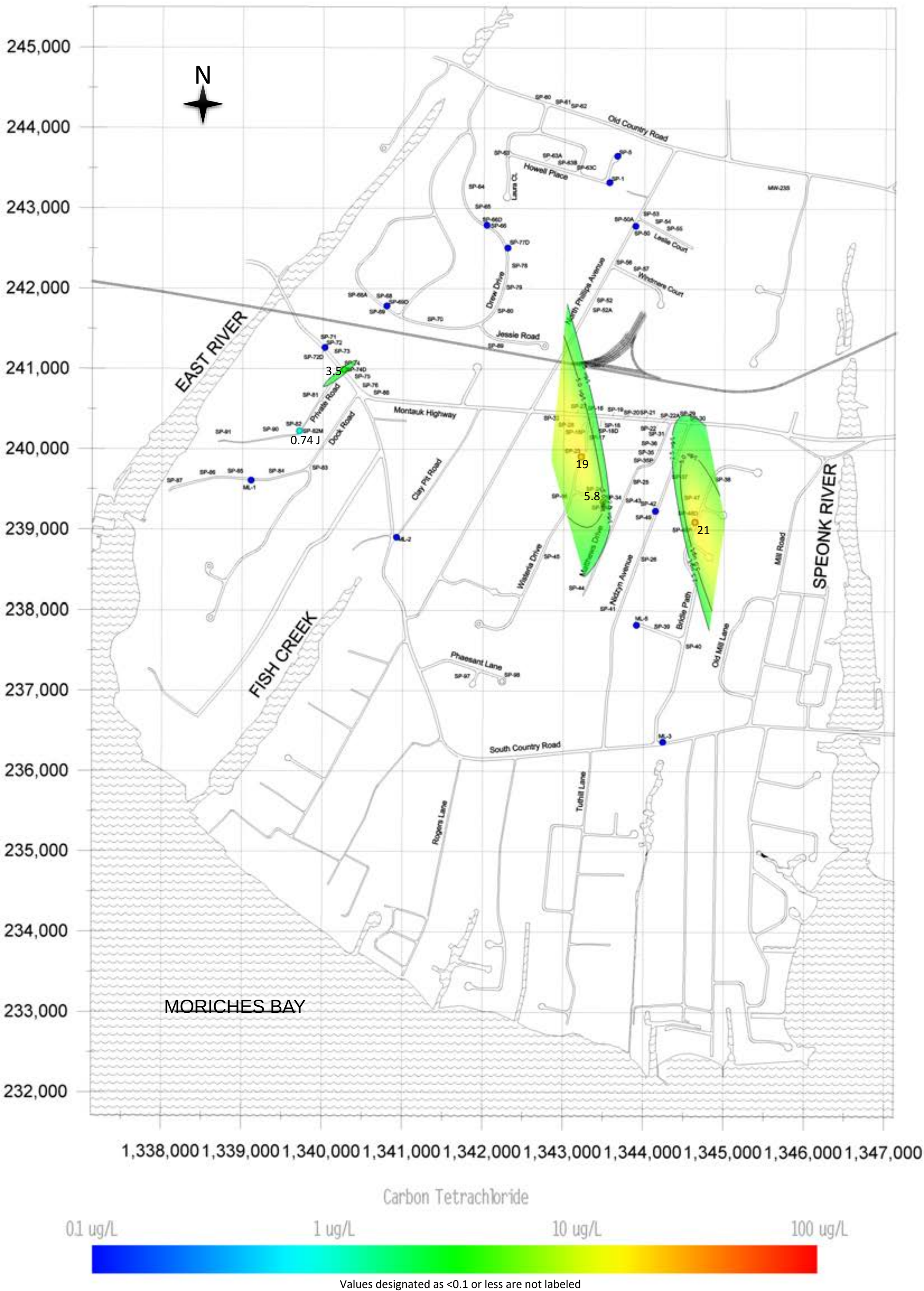
Speonk Solvent Plume
NYSDEC Site No. 152185
Total VOCs
Intermediate 40-80 Feet Deep
April 2018 (Maximum Concentration Values)

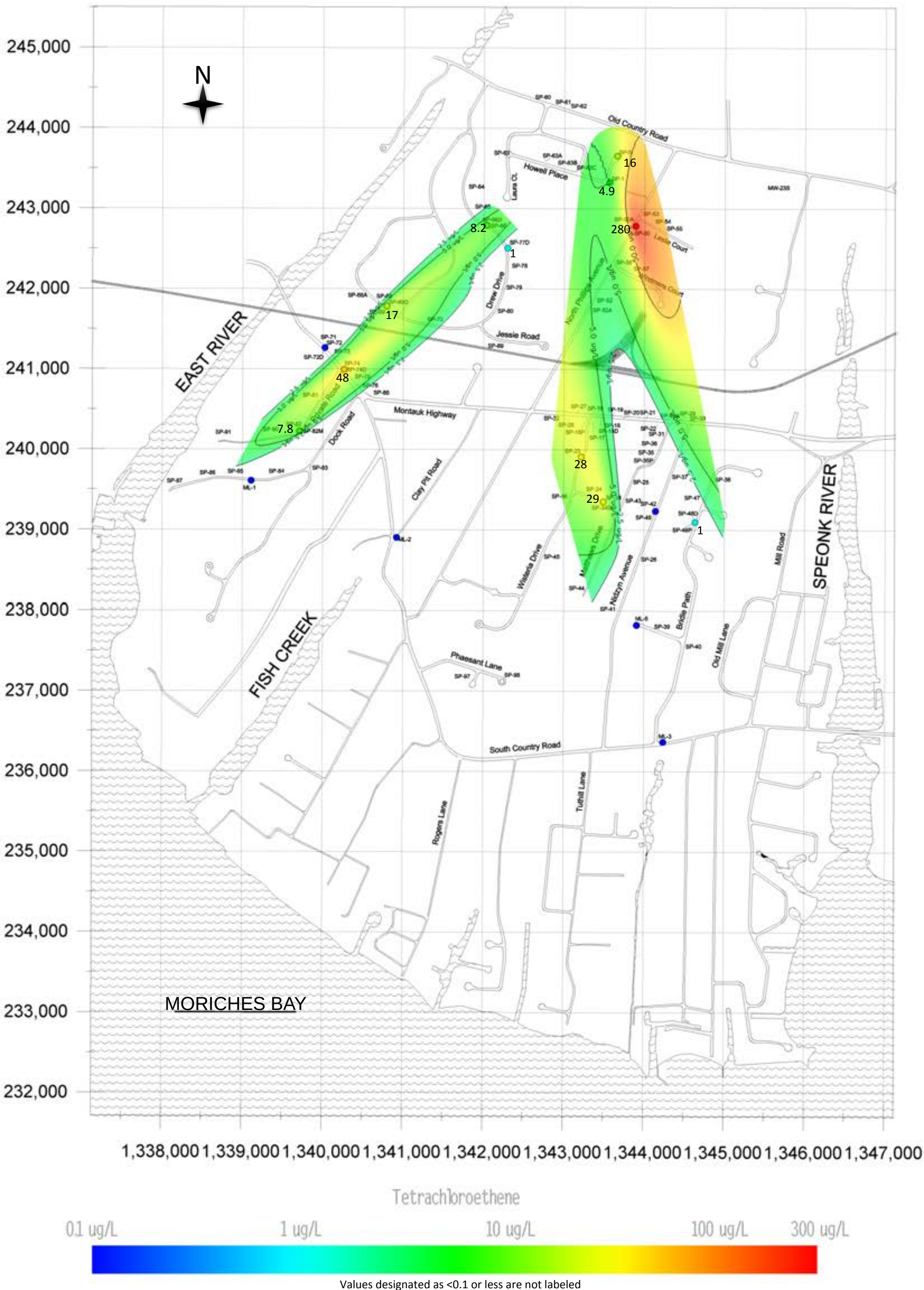
Figure 17



Speonk Solvent Plume
NYSDEC Site No. 152185
Carbon Tetrachloride
80 Feet to Maximum Depth
April 2018 (Maximum Concentration Values)

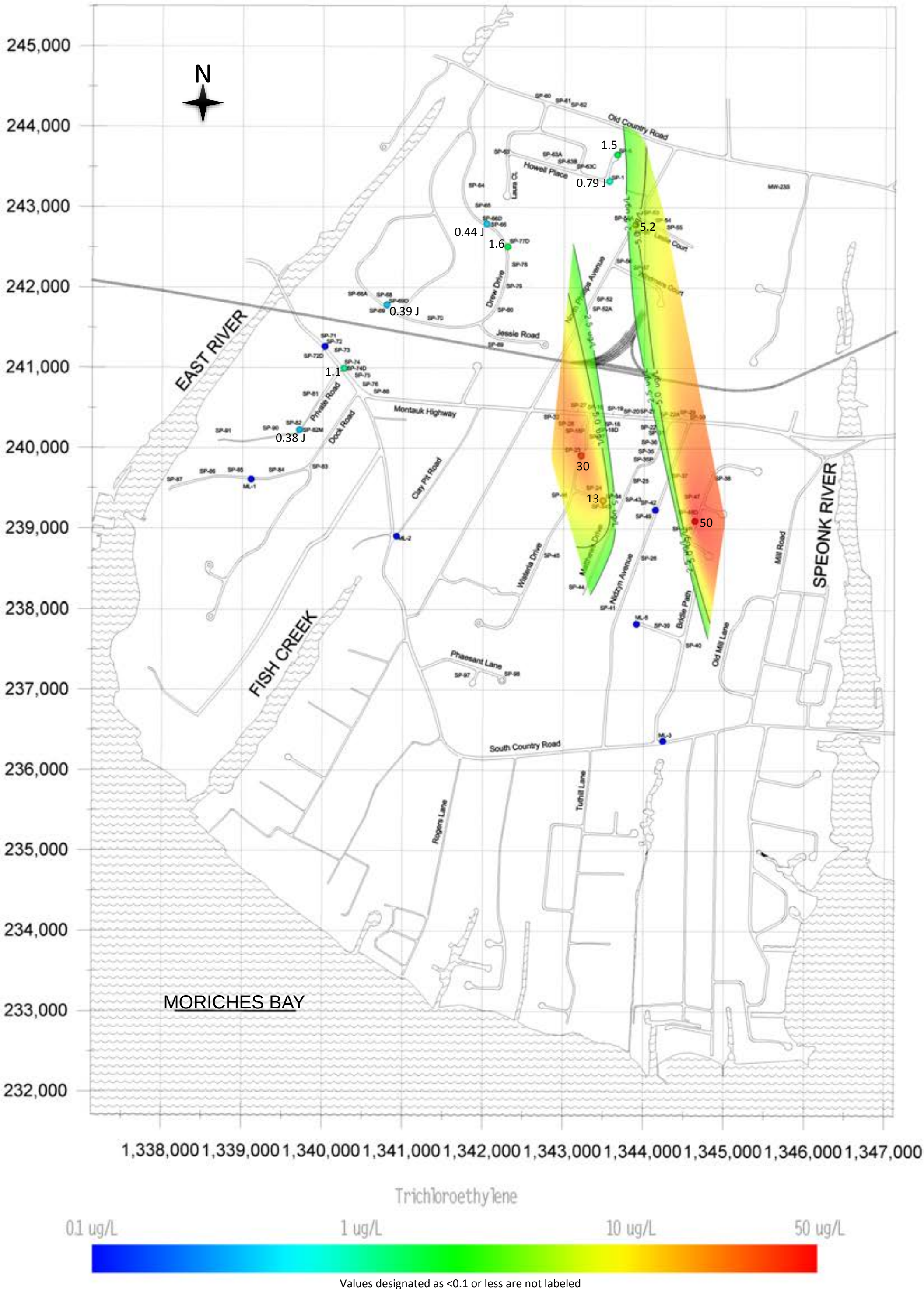
Figure 18





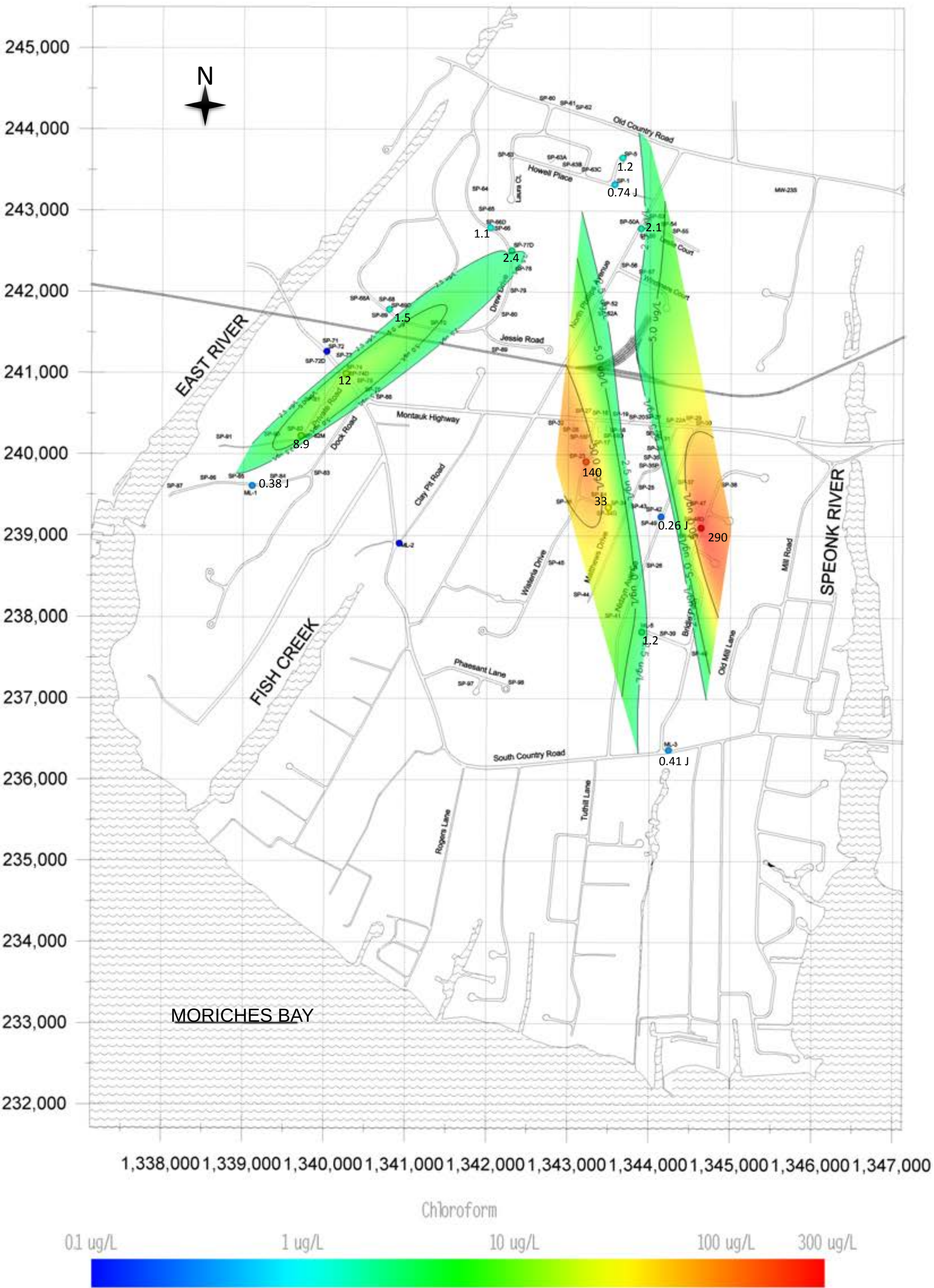
Speonk Solvent Plume
NYSDEC Site No. 152185
Trichloroethylene
80 Feet to Maximum Depth
April 2018 (Maximum Concentration Values)

Figure 20



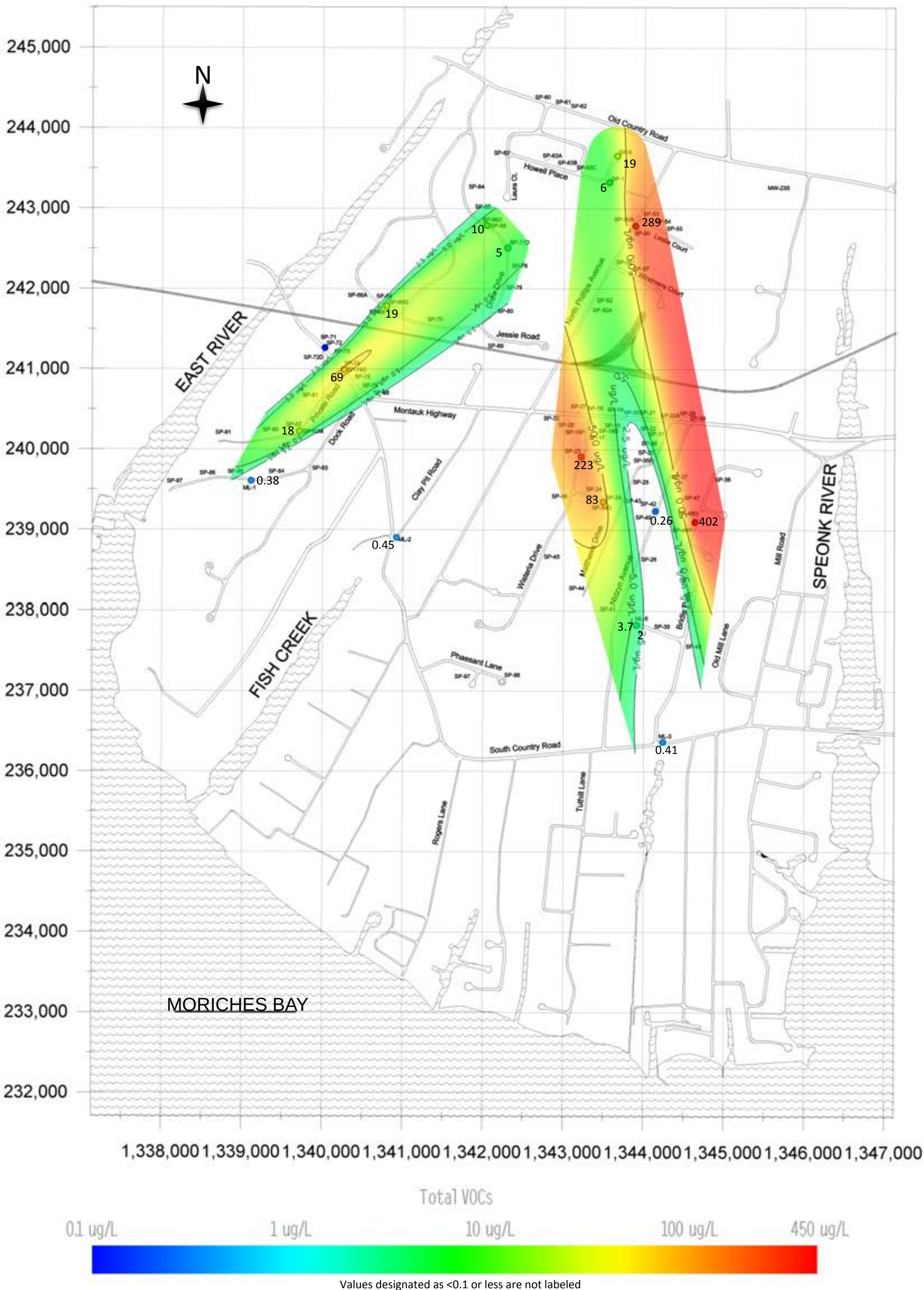
Speonk Solvent Plume
NYSDEC Site No. 152185
Chloroform
80 Feet to Maximum Depth
April 2018 (Maximum Concentration Values)

Figure 21

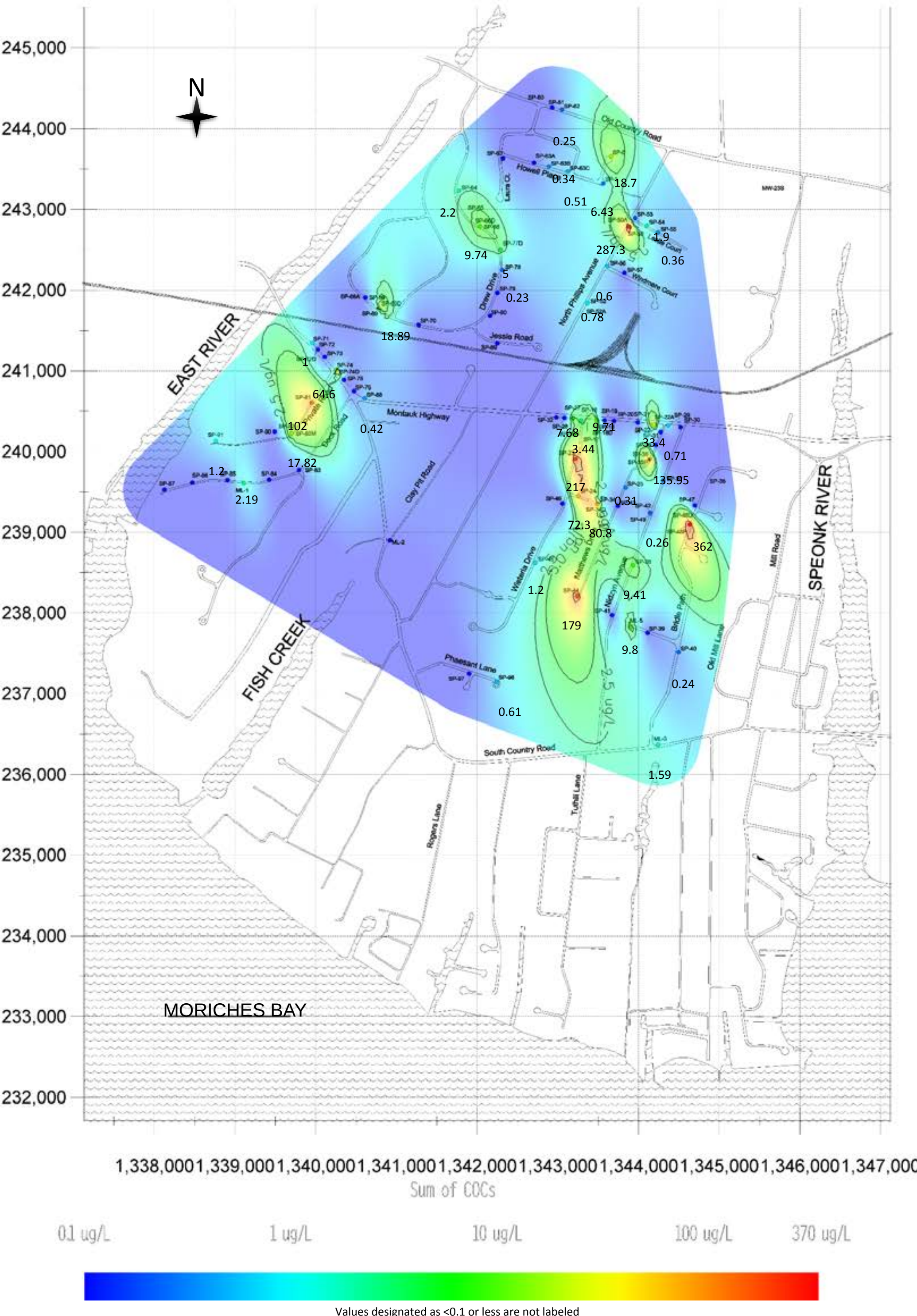


Speonk Solvent Plume
NYSDEC Site No. 152185
Total VOCs
80 Feet to Maximum Depth
April 2018 (Maximum Concentration Values)

Figure 22



Speonk Solvent Plume
NYSDEC Site No. 152185
Sum of Carbon Tetrachloride, PCE, TCE and Chloroform
for all Depth Intervals
April 2018 (Maximum Concentration Values)



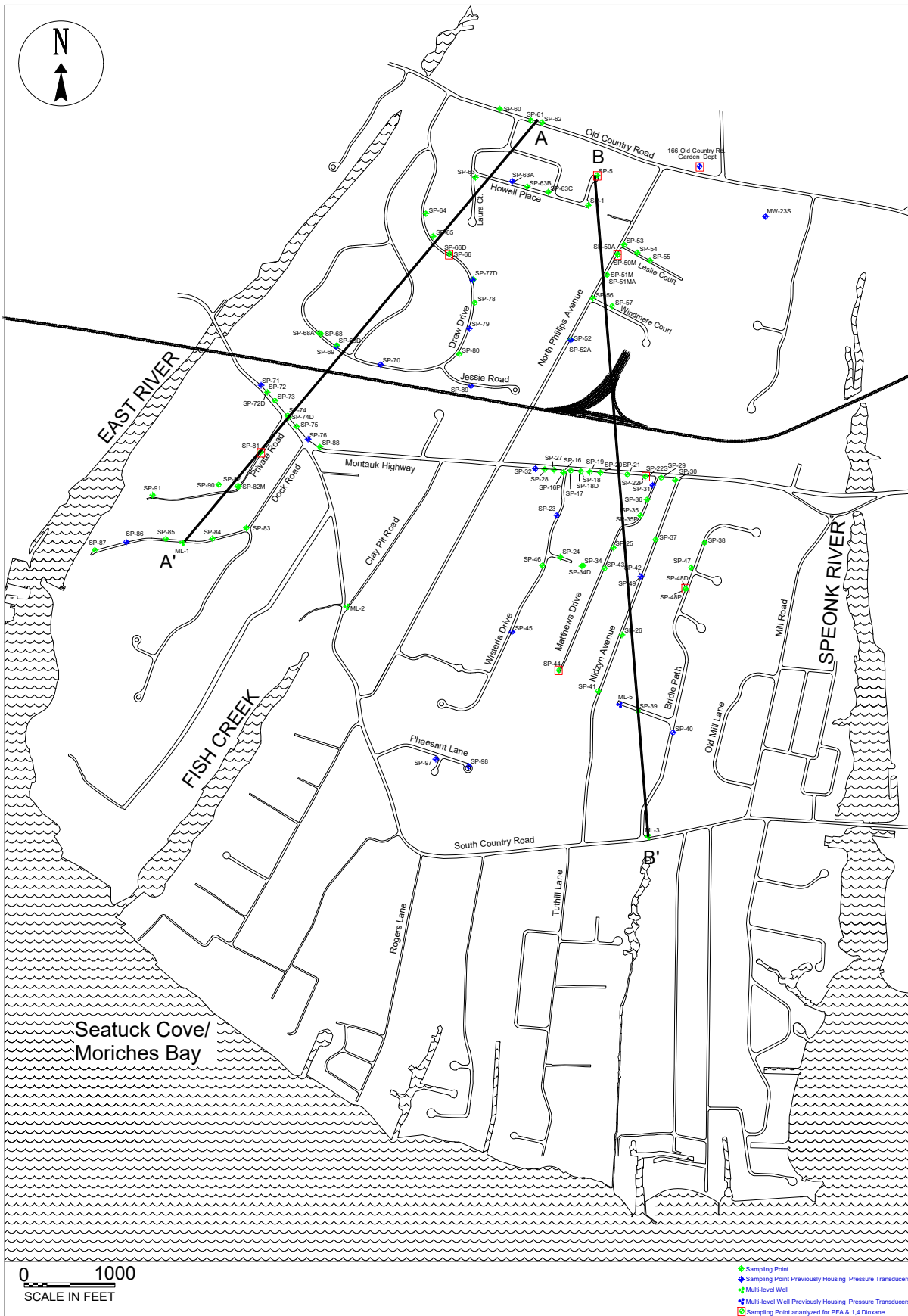


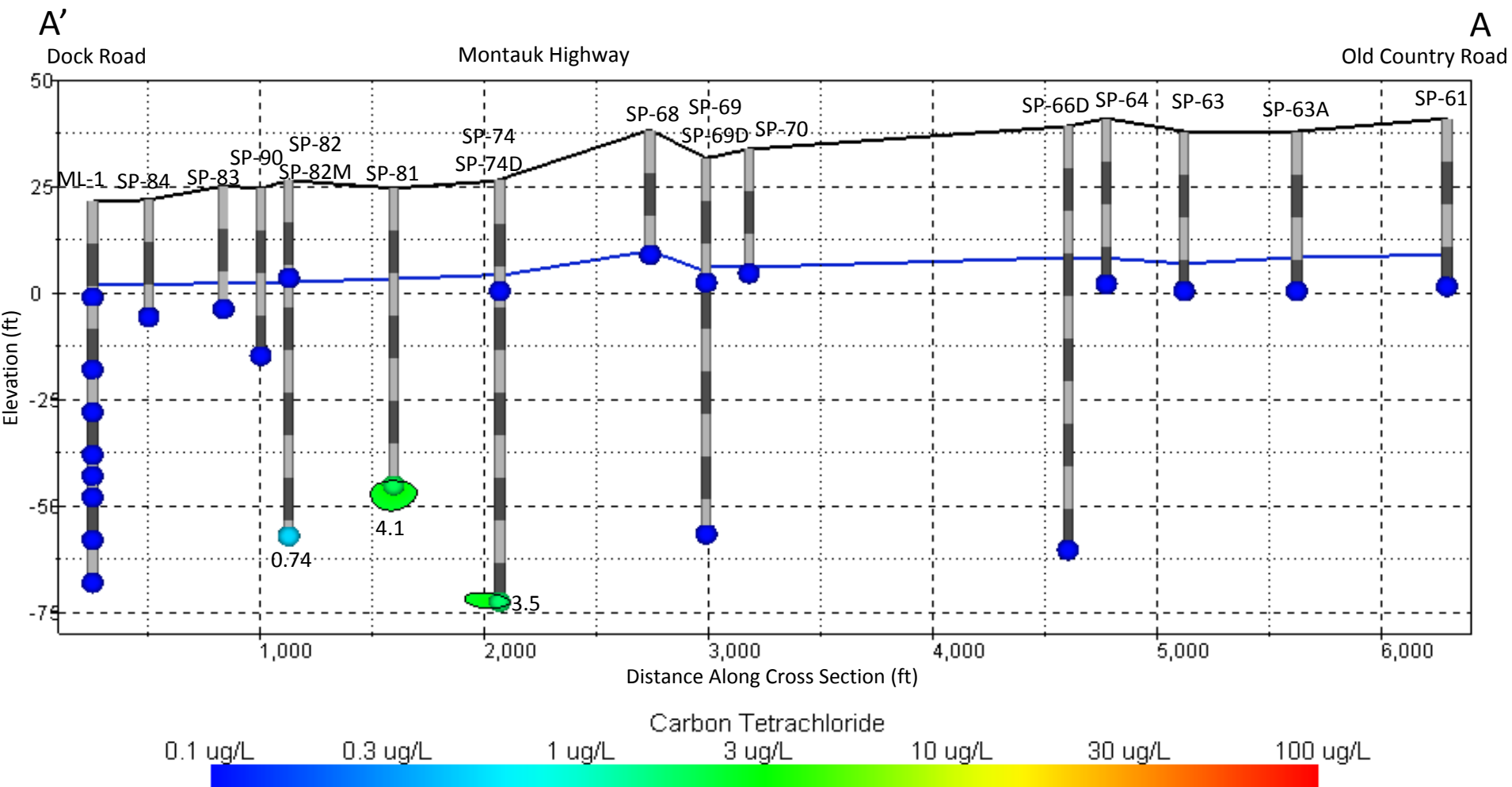
Figure 24.
Site Map
with Cross Sections A-A' & B-B'

Speonk Solvent Plume
North Phillips Avenue
Speonk, NY
Site No. 152185



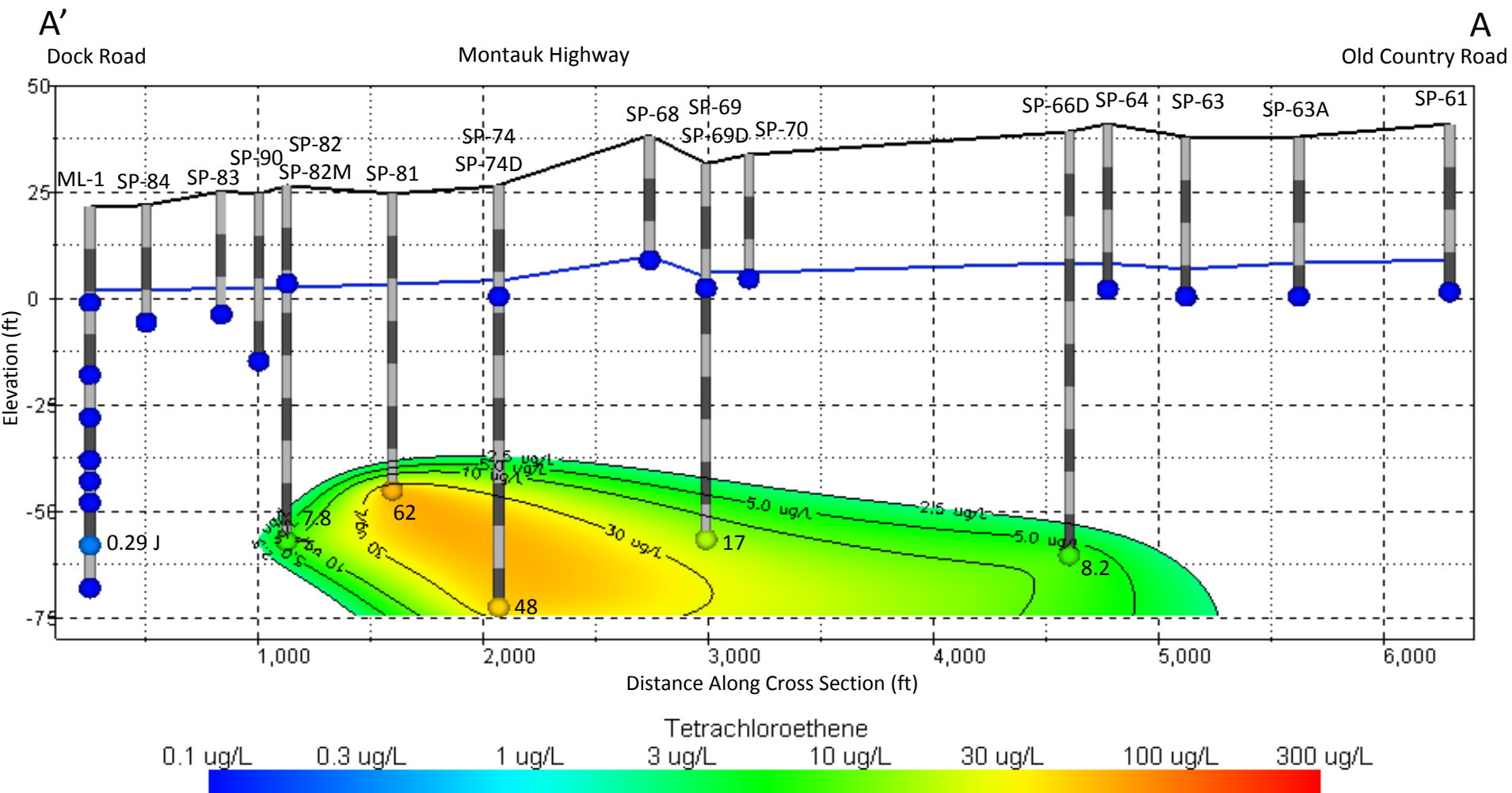
ENVIRONMENTAL
ASSESSMENT &
REMEDIATIONS

Speonk Solvent Plume
NYSDEC Site No. 152185
Carbon Tetrachloride Cross Section A'-A



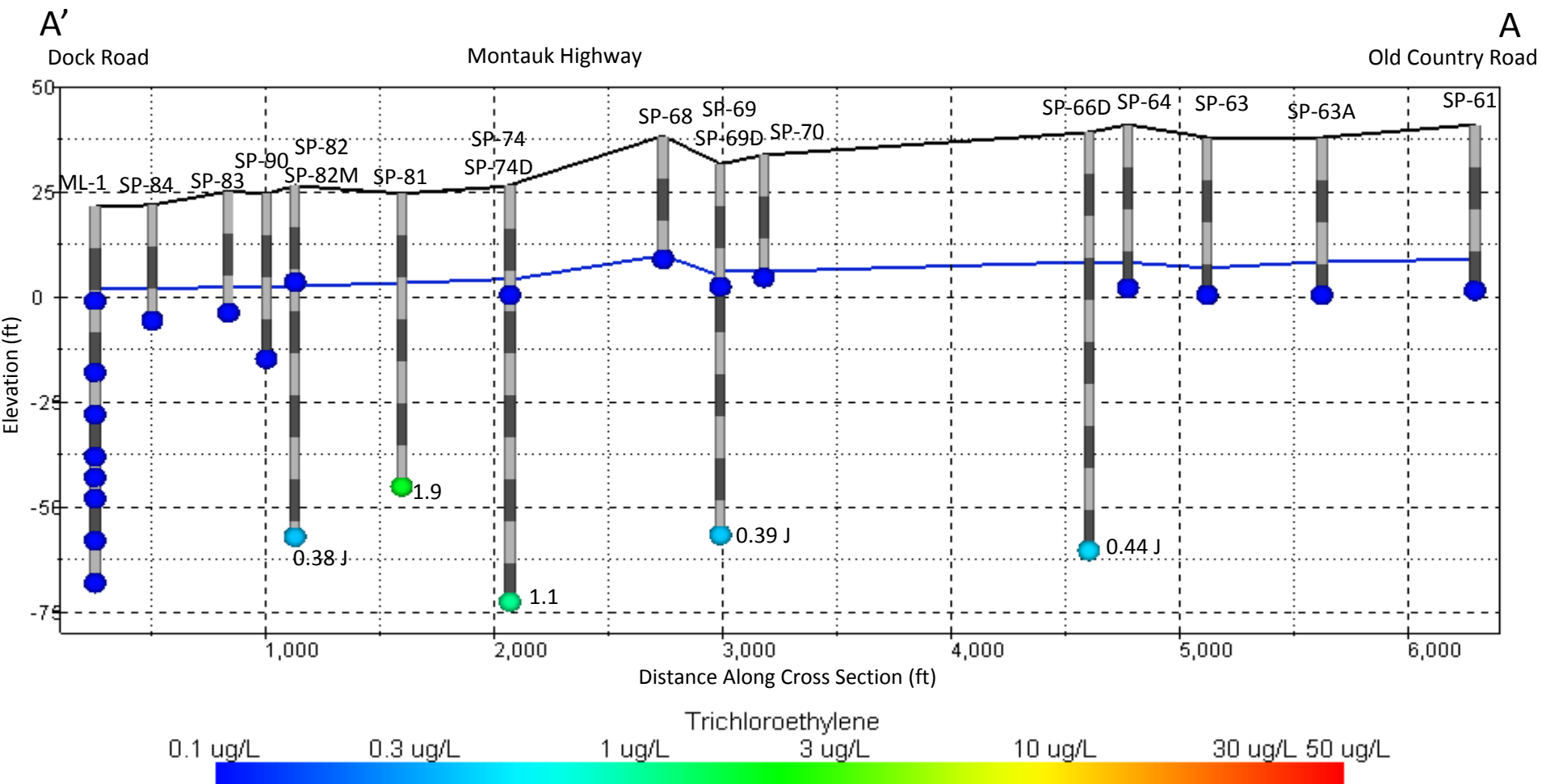
Values designated as <0.1 are not labeled

Speonk Solvent Plume
NYSDEC Site No. 152185
Tetrachloroethene Cross Section A'-A



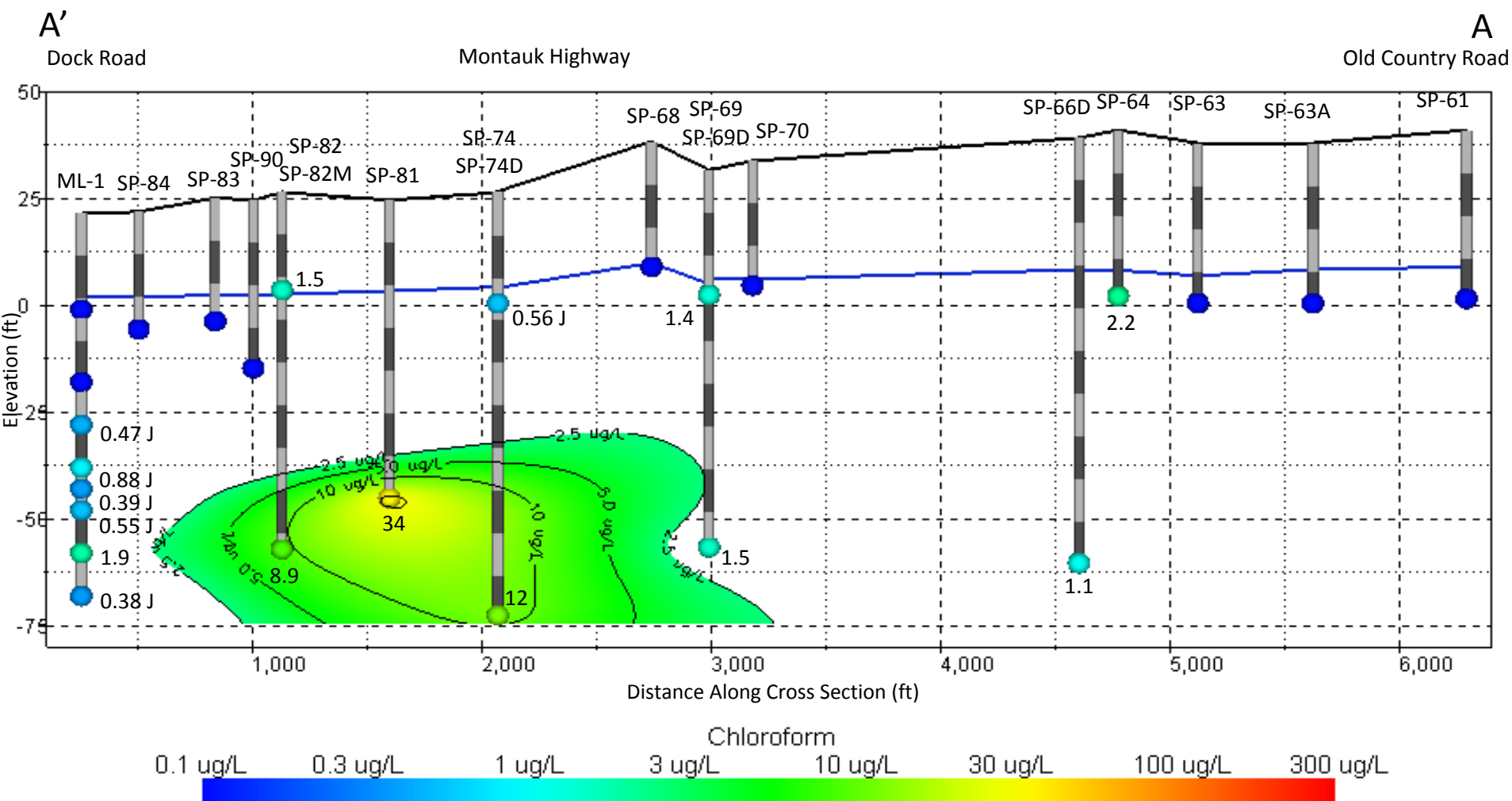
Values designated as <0.1 are not labeled

Speonk Solvent Plume
NYSDEC Site No. 152185
Trichloroethylene Cross Section A'-A



Values designated as <0.1 are not labeled

Speonk Solvent Plume
 NYSDEC Site No. 152185
 Chloroform Cross Section A'-A



Speonk Solvent Plume
NYSDEC Site No. 152185
Total VOCs Cross Section A'-A

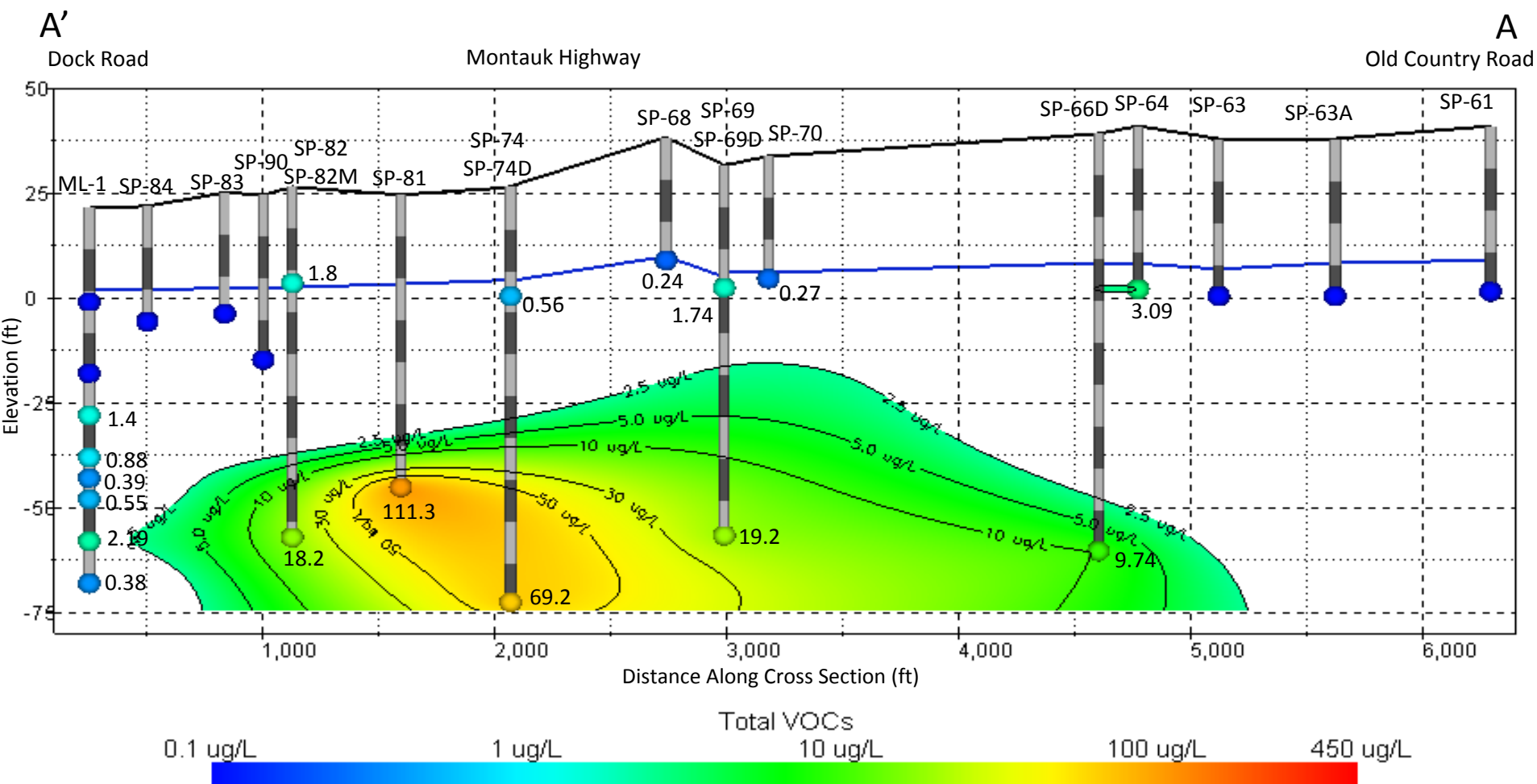


Figure 30

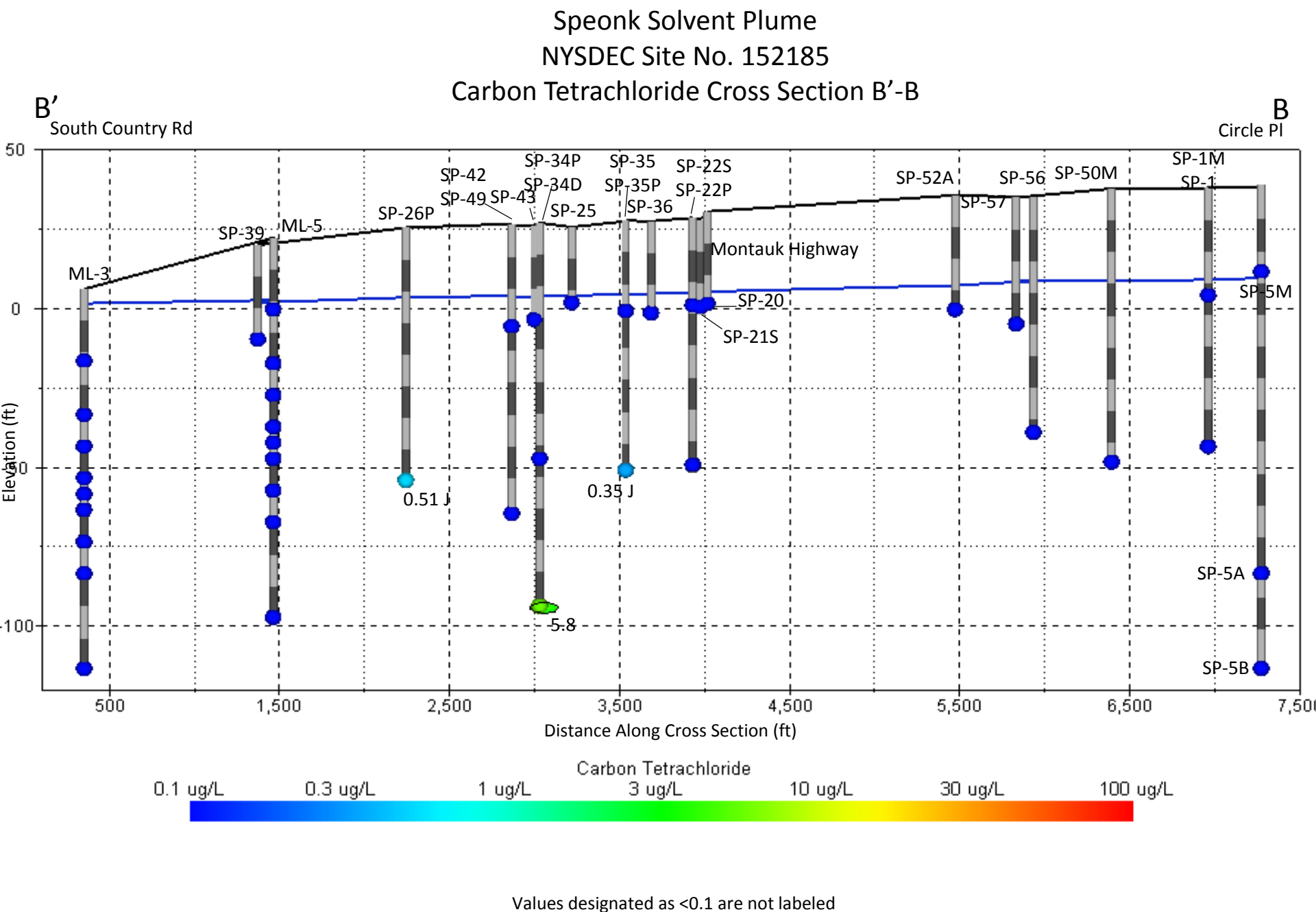


Figure 32

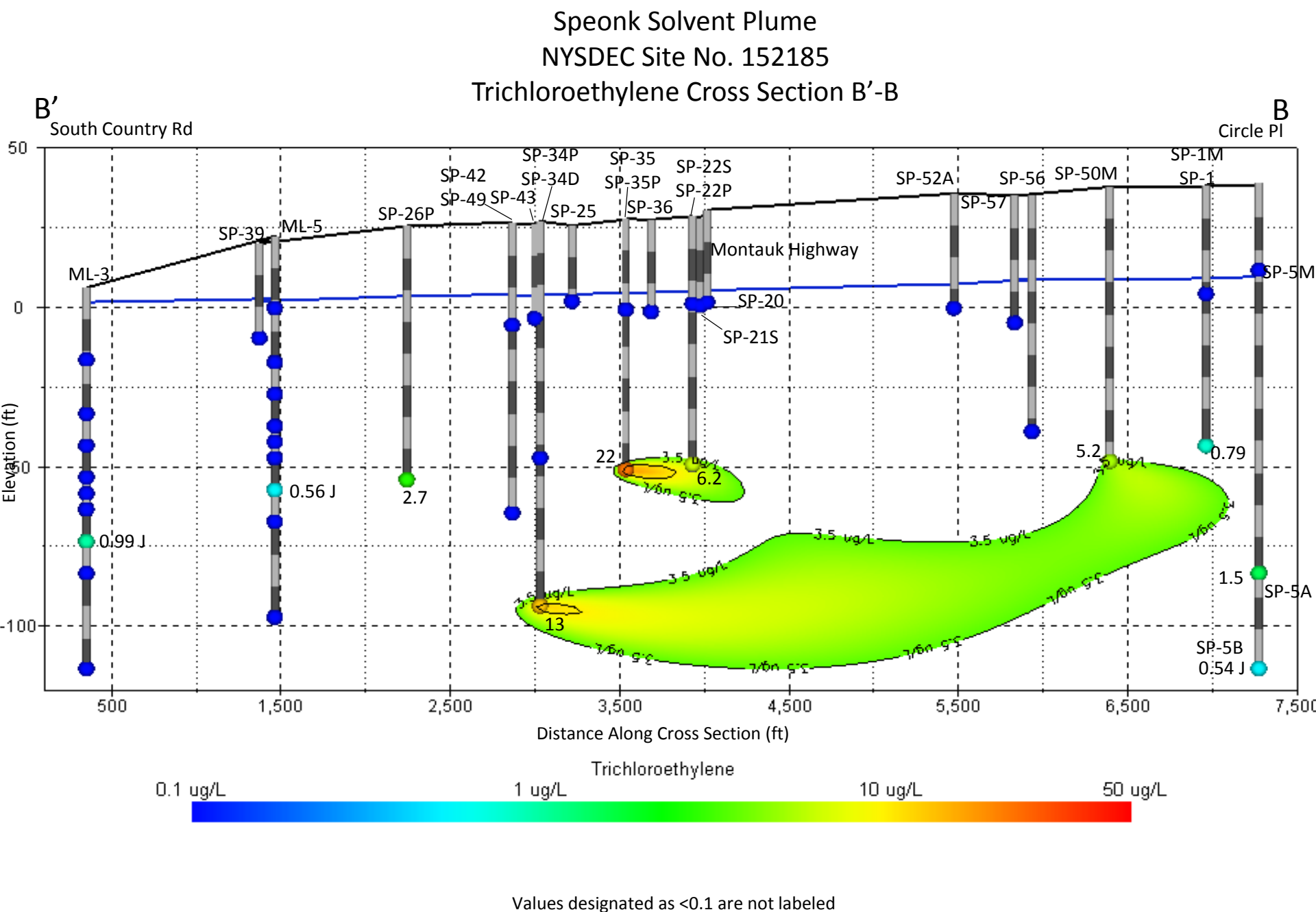


Figure 33

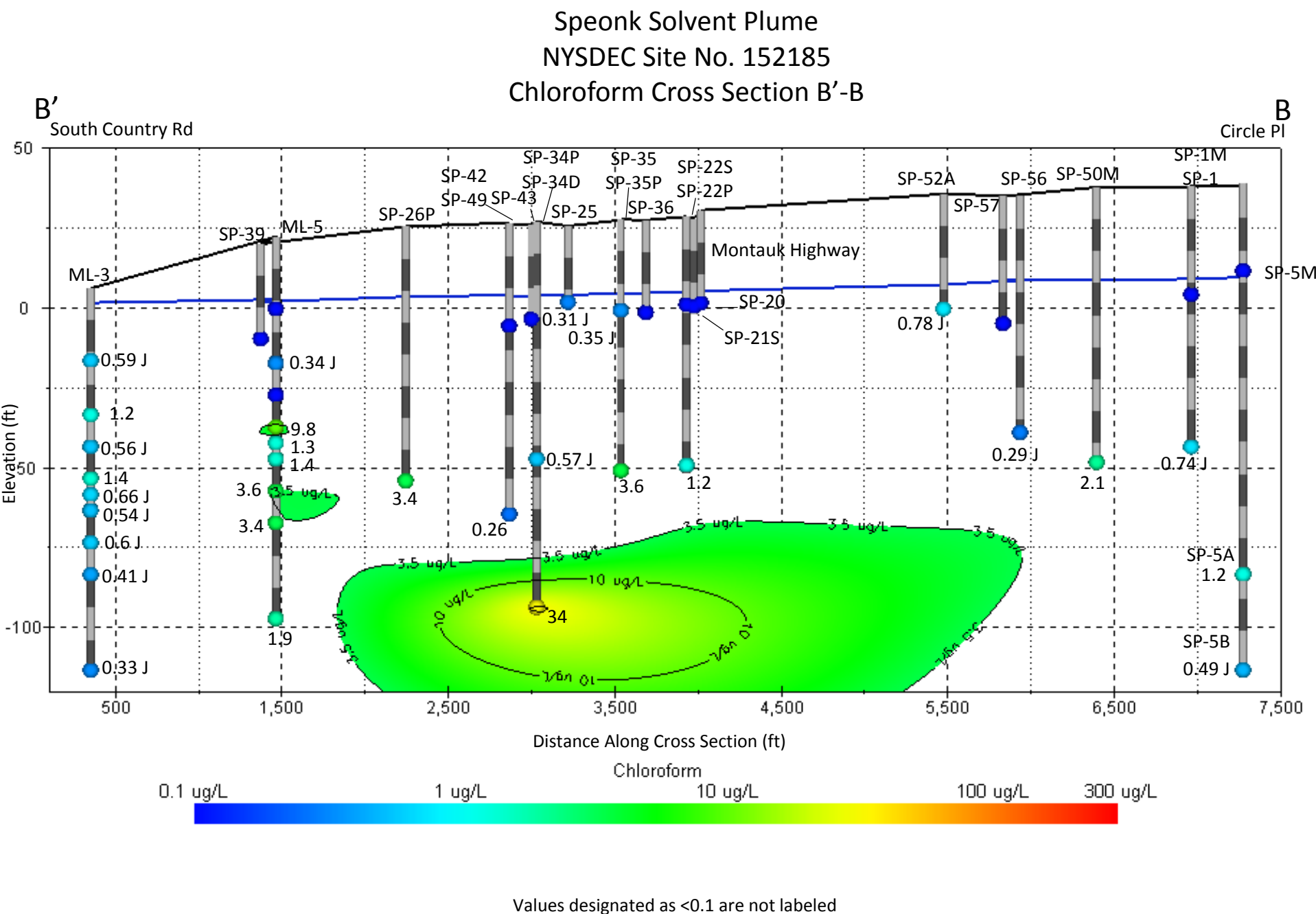
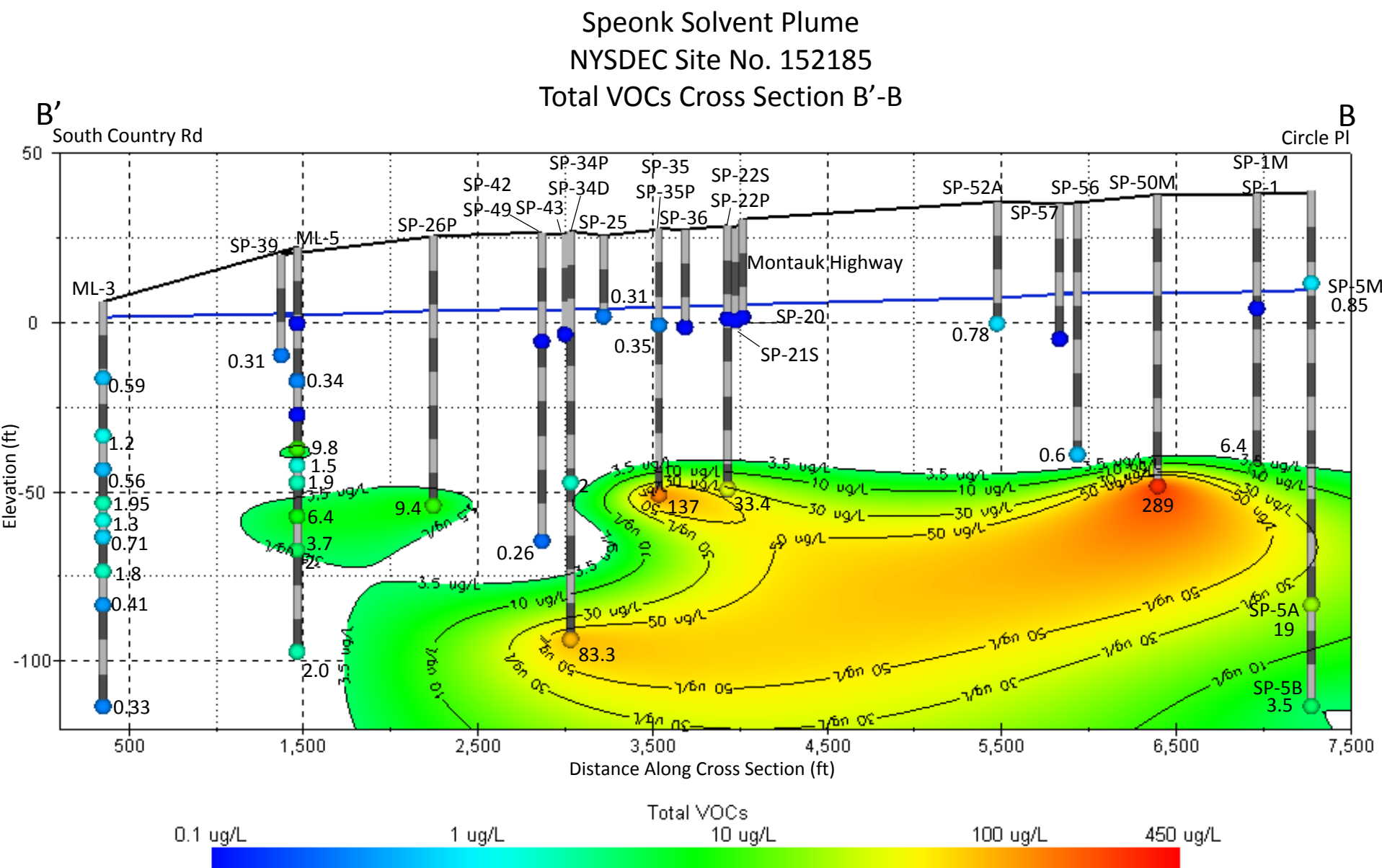


Figure 34



APPENDIX A – DATA USABILITY SUMMARY REPORTS



LABORATORY DATA CONSULTANTS, INC.

2701 Loker Ave. West, Suite 220, Carlsbad, CA 92010 Bus: 760-827-1100 Fax: 760-827-1099

Environmental Assessment & Remediations
225 Atlantic Ave
Patchogue, NY 11772
ATTN: Ms. Erin Quell

November 19, 2018

SUBJECT: REVISED DEC-SPEONK185, Site # 152185, Data Validation

Dear Ms. Quell

Enclosed are the revised validation reports for the fractions listed below. These SDGs were received on August 16, 2018. Attachment 1 is a summary of the samples that were reviewed for each analysis.

- Revision: Due to a laboratory error, the sample volume for sample SP-44P was adjusted and the results were revised. This DUSR reflects the corrected concentrations.

LDC Project #42929 RV1:

SDG

Fraction

200-43263-1, 200-43269-1	1,4-Dioxane, Fluorinated Alkyl Substances
200-43271-1, 200-43680-1	
460-155047-1, 460-155070-1	
460-155112-1, 460-155882-1	

The data validation was performed under Category B validation guidelines. The analyses were validated using the following documents and variances, as applicable to each method:

- USEPA Region 2 Standard Operating Procedure for Semivolatile Data Validation, SOP HW-35A, Revision 1; September 2016
- USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review; EPA 540-R-2017-002; January 2017
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998; IIIB, November 2004; update IV, February 2007; update V, July 2014

Please feel free to contact us if you have any questions.

Sincerely,

Christina Rink
Project Manager/Senior Chemist

[illegible]

Site: Speonk Solvent Plume
Laboratory: TestAmerica, Inc., South Burlington, VT
Report No.: 200-43263-1
Reviewer: Pei Geng and Christina Rink/Laboratory Data Consultants for
Environmental Assessment & Remediations, Patchogue, NY
Date: November 16, 2018

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SP-44P	200-43263-1	Fluorinated Alkyl Substances
SP-48P	200-43263-2	Fluorinated Alkyl Substances
SP-I	200-43263-3	Fluorinated Alkyl Substances
SSP-EQUIPMENT BLANK 1_20180427	200-43263-4	Fluorinated Alkyl Substances
SSP-EQUIPMENT BLANK 2_20180423	200-43263-5	Fluorinated Alkyl Substances
SP-48PMS	200-43263-2MS	Fluorinated Alkyl Substances
SP-48PMSD	200-43263-2MSD	Fluorinated Alkyl Substances

Associated QC Samples(s):

Field/Trip Blanks: SSP-EQUIPMENT BLANK 1_20180427,
SSP-EQUIPMENT BLANK 2_20180423

Field Duplicate pair: SP-48P and SP-I

The above-listed water samples were collected on April 27, 2018 and were analyzed for fluorinated alkyl substances by method 537 modified. The data validation was performed in accordance with the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA 540-R-2017-002 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Labeled Compounds
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

LC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial Calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	ICAL %D	Associated Samples		Validation Action
05/11/18	CS-2	6:2FTS	32.3	SP-44P	X	J detects/UJ nondetects
		8:2FTS	58.7	SP-48P SSP-EQUIPMENT BLANK 1_20180427 SSP-EQUIPMENT BLANK 2_20180423	X	J detects/UJ nondetects
05/21/18	CS-2	6:2FTS	33.5	SP-I	X	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 35; estimate (J/UJ) positive and nondetect results.

XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.

SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.

+= Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The 6:2FTS and 8:2FTS results for the samples listed above were estimated due to true value exceedances. The bias cannot be determined. The results can be used for project objectives as estimated values (J) or nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing calibration:

All criteria were met.

Blanks

Contamination was detected in the associated fluorinated alkyl substances method blank samples. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at the reporting limit (RL) for contaminants. The following table summarizes the contamination detected.

Blank ID	Compound	Level Detected	Action Level	Associated Samples
MB 200-129214/1-A	Perfluoropentanoic acid	0.639 ng/L	RL	SP-44P
	Perfluorohexanoic acid	0.616 ng/L	RL	SP-48P
	Perfluorodecanoic acid	0.564 ng/L	RL	SP-I
	Perfluorohexanesulfonic acid	0.704 ng/L	RL	SSP-EQUIPMENT BLANK 1_20180427 SSP-EQUIPMENT BLANK 2_20180423

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.
- If the sample concentration was > the RL and > the Action Level, qualification of the data was not required.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
SP-48P	Perfluoropentanoic acid	1.62 ng/L	1.79U ng/L
	Perfluorohexanesulfonic acid	1.73 ng/L	1.79U ng/L
SP-I	Perfluorohexanoic acid	1.13 ng/L	1.68U ng/L
	Perfluorohexanesulfonic acid	1.22 ng/L	1.68U ng/L
SSP-EQUIPMENT BLANK 1_20180427	Perfluoropentanoic acid	0.64 ng/L	1.62U ng/L
	Perfluorohexanoic acid	0.58 ng/L	1.62U ng/L
	Perfluorohexanesulfonic acid	0.47 ng/L	1.62U ng/L
SSP-EQUIPMENT BLANK 2_20180423	Perfluoropentanoic acid	0.37 ng/L	1.63U ng/L
	Perfluorohexanoic acid	0.51 ng/L	1.63U ng/L
	Perfluorodecanoic acid	0.45 ng/L	1.63U ng/L
	Perfluorohexanesulfonic acid	0.59 ng/L	1.63U ng/L

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.

Contamination was detected in the equipment blank samples SSP-EQUIPMENT BLANK 1_20180427 and SSP-EQUIPMENT BLANK 2_20180423 for fluorinated alkyl substances analysis. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at the reporting limit (RL) for contaminants. The following table summarizes the contamination detected.

Field Blank ID	Compound	Level Detected	Action Level	Associated Samples
SSP-EQUIPMENT BLANK 1_20180427	Perfluoropentanoic acid	0.64 ng/L	RL	SP-44P
	Perfluorohexanoic acid	0.58 ng/L	RL	SP-48P
	Perfluorotridecanoic acid	0.42 ng/L	RL	SP-I
	Perfluorohexanesulfonic acid	0.47 ng/L	RL	
SSP-EQUIPMENT BLANK 2_20180423	Perfluoropentanoic acid	0.37 ng/L	RL	SP-44P
	Perfluorohexanoic acid	0.51 ng/L	RL	SP-48P
	Perfluorohexanesulfonic acid	0.59 ng/L	RL	SP-I
	Perfluorobutanoic acid	0.68 ng/L	RL	
	Perfluorodecanoic acid	0.45 ng/L	RL	
	Perfluorooctanesulfonic acid	0.28 ng/L	RL	
	Perfluorooctane sulfonamide	0.41 ng/L	RL	

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
SP-44P	Perfluorobutanoic acid	1.41 ng/L	1.80U ng/L
SP-48P	Perfluoropentanoic acid	1.62 ng/L	1.79U ng/L
	Perfluorohexanesulfonic acid	1.73 ng/L	1.79U ng/L
	Perfluorobutanoic acid	1.22 ng/L	1.79U ng/L
SP-I	Perfluorohexanoic acid	1.13 ng/L	1.68U ng/L
	Perfluorohexanesulfonic acid	1.22 ng/L	1.68U ng/L

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.

MS/MSD Results

MS/MSD analyses were performed on sample SP-48 for fluorinated alkyl substances analysis. All criteria were met.

LCS Results

All criteria were met.

Labeled Compounds

All criteria were met.

Field Duplicate Results

Samples SP-48P and SP-I were submitted as the field duplicate pair with this sample group. The following table summarizes the concentrations and validation actions taken.

Compound	Concentration (ug/L)		RPD
	SP-48P	SP-I	
Perfluorobutanoic acid	1.22	1.96	47
Perfluoropentanoic acid	1.62	2.34	36
Perfluorohexanoic acid	2.23	1.13	65
Perfluoroheptanoic acid	1.56	1.53	2
Perfluorooctanoic acid	3.23	3.44	6
Perfluorononanoic acid	0.57	0.30	62
Perfluorobutanesulfonic acid	1.19	0.93	25
Perfluorohexanesulfonic acid	1.73	1.22	35
Perfluorooctanesulfonic acid	2.86	2.77	3

Quantitation Limits and Data Assessment

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL) in the fluorinated alkyl substances analysis. These results were qualified as estimated (J) by the laboratory.

Dilutions were not required for fluorinated alkyl substances analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

- U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.
- UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.
- JN - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.
- R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Burlington</u>	Job No.: <u>200-43263-1</u>
SDG No.: _____	
Client Sample ID: <u>SP-44P</u>	Lab Sample ID: <u>200-43263-1</u>
Matrix: <u>Water</u>	Lab File ID: <u>PF051018A43.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>04/27/2018 09:49</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>05/07/2018 14:00</u>
Sample wt/vol: <u>278 (mL)</u>	Date Analyzed: <u>05/11/2018 19:13</u>
Con. Extract Vol.: <u>0.5 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>C-18</u> ID: <u>4.6 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>129349</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.41	J <u>1.60U</u>	1.80	0.40
2706-90-3	Perfluoropentanoic acid (PFPeA)	2.84	B	1.80	0.40
307-24-4	Perfluorohexanoic acid (PFHxA)	3.28	B	1.80	0.40
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.48	J <u>J</u>	1.80	0.26
335-67-1	Perfluorooctanoic acid (PFOA)	4.88		1.80	0.42
375-95-1	Perfluorononanoic acid (PFNA)	0.39	J <u>J</u>	1.80	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	1.80	U <u>U</u>	1.80	0.40
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.80	U <u>U</u>	1.80	0.40
307-55-1	Perfluorododecanoic acid (PFDoA)	1.80	U <u>U</u>	1.80	0.40
72629-94-8	Perfluorotridecanoic acid (PFTriA)	1.80	U <u>U</u>	1.80	0.40
376-06-7	Perfluorotetradecanoic acid (PFTeA)	1.80	U <u>U</u>	1.80	0.40
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.91	J <u>J</u>	1.80	0.79
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	2.95	B	1.80	0.25
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.54	J <u>J</u>	1.80	0.40
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	6.02		1.80	0.27
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.80	U <u>U</u>	1.80	0.40
754-91-6	Perfluorooctanesulfonamide (FOSA)	1.80	U <u>U</u>	1.80	0.40
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	1.80	U <u>U</u>	1.80	0.54
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.57	J <u>J</u>	1.80	0.54
27619-97-2	6:2 FTS	0.55	J <u>J</u>	1.80	0.54
39108-34-4	8:2 FTS	1.80	U <u>U</u>	1.80	0.54

NOV 16 2018

Initials: ER

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-43263-1
 SDG No.: _____
 Client Sample ID: SP-48P Lab Sample ID: 200-43263-2
 Matrix: Water Lab File ID: PF051018A44.d
 Analysis Method: 537 (modified) Date Collected: 04/27/2018 11:37
 Extraction Method: 3535 Date Extracted: 05/07/2018 14:00
 Sample wt/vol: 279.2 (mL) Date Analyzed: 05/11/2018 19:30
 Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1
 Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 129349 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.22	J 1.79U	1.79	0.40
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.62	J B 1.79U	1.79	0.40
307-24-4	Perfluorohexanoic acid (PFHxA)	2.23	B	1.79	0.40
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.56	J J	1.79	0.26
335-67-1	Perfluorooctanoic acid (PFOA)	3.23		1.79	0.42
375-95-1	Perfluorononanoic acid (PFNA)	0.57	J J	1.79	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	1.79	U J	1.79	0.40
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.79	U	1.79	0.40
307-55-1	Perfluorododecanoic acid (PFDoA)	1.79	U	1.79	0.40
72629-94-8	Perfluorotridecanoic Acid (PFTrIA)	1.79	U	1.79	0.40
376-06-7	Perfluorotetradecanoic acid (PFTeA)	1.79	U	1.79	0.40
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.19	J J	1.79	0.79
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.73	J B 1.79U	1.79	0.25
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.79	U J	1.79	0.40
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.86		1.79	0.27
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.79	U	1.79	0.40
754-91-6	Perfluorooctane Sulfonamide (FOSA)	1.79	U	1.79	0.40
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.79	U	1.79	0.54
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.79	U	1.79	0.54
27619-97-2	6:2FTS	1.79	U UJ	1.79	0.54
39108-34-4	8:2FTS	1.79	U UJ	1.79	0.54

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Initials: *CR*

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-43263-1
 SDG No.: _____
 Client Sample ID: SP-I Lab Sample ID: 200-43263-3
 Matrix: Water Lab File ID: PF052218A09.d
 Analysis Method: 537 (modified) Date Collected: 04/27/2018 00:00
 Extraction Method: 3535 Date Extracted: 05/07/2018 14:00
 Sample wt/vol: 297.6(mL) Date Analyzed: 05/22/2018 16:37
 Con. Extract Vol.: 0.5(mL) Dilution Factor: 1
 Injection Volume: 20(uL) GC Column: C-18 ID: 4.6 (mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 129759 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.96		1.68	0.37
2706-90-3	Perfluoropentanoic acid (PFPeA)	2.34	B	1.68	0.37
307-24-4	Perfluorohexanoic acid (PFHxA)	1.13	J B 1.68U	1.68	0.37
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.53	J	1.68	0.24
335-67-1	Perfluorooctanoic acid (PFOA)	3.44		1.68	0.39
375-95-1	Perfluorononanoic acid (PFNA)	0.30	J	1.68	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	1.68	U	1.68	0.37
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.68	U	1.68	0.37
307-55-1	Perfluorododecanoic acid (PFDoA)	1.68	U	1.68	0.37
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	1.68	U	1.68	0.37
376-06-7	Perfluorotetradecanoic acid (PFTeA)	1.68	U	1.68	0.37
375-73-5	Perfluorobutanesulfonic acid (PFBS)	0.93	J	1.68	0.74
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.22	J B 1.68U	1.68	0.24
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.68	U	1.68	0.37
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.77		1.68	0.25
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.68	U	1.68	0.37
754-91-6	Perfluorooctane Sulfonamide (FOSA)	1.68	U	1.68	0.37
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.68	U	1.68	0.50
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.68	U	1.68	0.50
27619-97-2	6:2FTS	1.68	U 0.5	1.68	0.50
39108-34-4	8:2FTS	1.68	U	1.68	0.50

AUG 31 2018

Initials: CR

FORM I

Job No.: 200-43263-1

Lab Sample ID: 200-43263-4

Lab File ID: PF051018A49.d

Date Collected: 04/27/2018 13:30

Date Extracted: 05/07/2018 14:00

Date Analyzed: 05/11/2018 20:50

Dilution Factor: 1

GC Column: C-18 ID: 4.6 (mm)

GPC Cleanup: (Y/N) N

Units: ng/L

AUG 31 2018

FORM I 537 (modified)

FORM I

Lab Name: <u>TestAmerica Burlington</u>	Job No.: <u>200-43263-1</u>
SDG No.: _____	
Client Sample ID: <u>SSP-EQUIPMENT BLANK</u> <u>2 20180423</u>	Lab Sample ID: <u>200-43263-5</u>
Matrix: <u>Water</u>	Lab File ID: <u>PF051018A50.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>04/27/2018 13:30</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>05/07/2018 14:00</u>
Sample wt/vol: <u>307.3(mL)</u>	Date Analyzed: <u>05/11/2018 21:06</u>
Con. Extract Vol.: <u>0.5(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20(uL)</u>	GC Column: <u>C-18</u> ID: <u>4.6(mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>129349</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.68	J	1.63	0.36
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.37	J B	1.63	0.36
307-24-4	Perfluorohexanoic acid (PFHxA)	0.51	J B	1.63	0.36
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.63	U	1.63	0.24
335-67-1	Perfluorooctanoic acid (PFOA)	1.63	U	1.63	0.38
375-95-1	Perfluorononanoic acid (PFNA)	1.63	U	1.63	0.21
335-76-2	Perfluorodecanoic acid (PFDA)	0.45	J B	1.63	0.36
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.63	U	1.63	0.36
307-55-1	Perfluorododecanoic acid (PFDoA)	1.63	U	1.63	0.36
72629-94-8	Perfluorotridecanoic Acid (PFTrIA)	1.63	U	1.63	0.36
376-06-7	Perfluorotetradecanoic acid (PFTeA)	1.63	U	1.63	0.36
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.63	U	1.63	0.72
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.59	J B	1.63	0.23
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.63	U	1.63	0.36
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.28	J	1.63	0.24
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.63	U	1.63	0.36
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.41	J	1.63	0.36
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMFeFOSAA)	1.63	U	1.63	0.49
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.63	U	1.63	0.49
27619-97-2	6:2FTS	1.63	U	1.63	0.49
39108-34-4	8:2FTS	1.63	U	1.63	0.49

AUG 31 2018

Initials: *CR*

LDC #: 42929A96
 SDG #: 200-43263-1
 Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET Category B

Date: 4/7/18
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: LC/MS Fluorinated Alkyl Substances (EPA Method 537-Modified)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	SW-A	RSD ≤ 35%, TMD / ICV ≤ 30%
IV.	Continuing calibration	A	ICV ≤ 30%
V.	Laboratory Blanks	SW	
VI.	Field blanks	SW	EB = 4.5
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	A	
IX.	Laboratory control samples	A	LCS
X.	Field duplicates	SW	D = 2 + 3
XI.	Labeled Compounds	A	
XII.	Compound quantitation RL/LOQ/LODs	A	RESULTS < RL - lots/A
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable
 N = Not provided/applicable
 SW = See worksheet

ND = No compounds detected
 R = Rinsate
 FB = Field blank

D = Duplicate
 TB = Trip blank
 EB = Equipment blank

SB=Source blank
 OTHER:

	Client ID	Lab ID	Matrix	Date
1	SP-44P	200-43263-1	Water	04/27/18
2	SP-48P	200-43263-2	Water	04/27/18
3	SP-I	200-43263-3	Water	04/27/18
4	SSP-EQUIPMENT BLANK 1_20180427	200-43263-4	Water	04/27/18
5	SSP-EQUIPMENT BLANK 2_20180423	200-43263-5	Water	04/27/18
6	SP-48PMS	200-43263-2MS	Water	04/27/18
7	SP-48PMSD	200-43263-2MSD	Water	04/27/18
8				

Notes:

VALIDATION FINDINGS CHECKLIST

Method: LC/MS PFOS/PFOAs (EPA Method 537M)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	☒	☐	☐	
Cooler temperature criteria was met.	☒	☐	☐	
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the specified criteria?	☒	☐	☐	
Were all samples analyzed within the 12 hour clock criteria?	☒	☐	☐	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	☒	☐	☐	
Were all percent relative standard deviations (%RSD) $\leq$ ²⁵ 20%?	☒	☐	☐	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of > 0.990 ?	☒	☐	☐	
Were the S/N ratio for all compounds within validation criteria?	☒	☐	☐	
Were all analytes within 70-130% or percent differences (%D) $\leq$ 30% of their true value for each calibration standard?	☒	☐	☐	
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	☒	☐	☐	
Were all percent differences (%D) $\leq$ 30%	☒	☐	☐	
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	☒	☐	☐	
Were all percent differences (%D) $\leq$ 30%	☒	☐	☐	
Were the S/N ratio for all compounds within validation criteria?	☒	☐	☐	
Were all the retention times within the acceptance windows?	☒	☐	☐	
V. Laboratory Blanks				
Was a method blank associated with every sample in this SDG?	☒	☐	☐	
Was a method blank analyzed for each matrix and concentration?	☒	☐	☐	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	☒	☐	☐	
VI. Field blanks				
Field blanks were identified in this SDG.	☒	☐	☐	
Target compounds were detected in the field blanks.	☒	☐	☐	
VII. Surrogate spikes				
Were all surrogate %R within the QC limits?	☐	☐	☒	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	☐	☐	☒	
VIII. Matrix spike/Matrix spike duplicates				

LDC #: 429-9A 26

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: [Signature]
2nd Reviewer: [Signature]

Validation Area	Yes	No	NA	Findings/Comments
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	☒	☐	☐	
Was a MS/MSD analyzed every 20 samples of each matrix?	☒	☐	☐	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	☒	☐	☐	
IV. Laboratory control samples				
Was an LCS analyzed for this SDG?	☒	☐	☐	
Was an LCS analyzed per extraction batch?	☒	☐	☐	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	☒	☐	☐	
X. Field duplicates				
Field duplicate pairs were identified in this SDG.	☐	☒	☐	
Target compounds were detected in the field duplicates.	☐	☐	☒	
XI. Internal Standards				
Were internal standard area counts within acceptance limits?	☒	☐	☐	
XII. Target compound identification				
Were the retention times of reported detects within the RT windows?	☒	☐	☐	
XIII. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	☒	☐	☐	
XIV. System performance				
System performance was found to be acceptable.	☒	☐	☐	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	☒	☐	☐	

TARGET COMPOUND WORKSHEET

METHOD: PFOS/PFOAs

A. Perfluorohexanoic acid (PFHxA)			
B. Perfluoroheptanoic acid (PFHpA)			
C. Perfluorooctanoic acid (PFOA)			
D. Perfluorononanoic acid (PFNA)			
E. Perfluorodecanoic acid (PFDA)			
F. Perfluoroundecanoic acid (PFUnA)			
G. Perfluorododecanoic acid (PFDoA)			
H. Perfluorotridecanoic acid (PFTriDA)			
I. Perfluorotetradecanoic acid (PFTeDA)			
J. Perfluorobutanesulfonic acid (PFBS)			
K. Perfluorohexanesulfonic acid (PFHxS)			
L. Perfluoroheptanesulfonic acid (PFHpS)			
M. Perfluorooctanesulfonic acid (PFOS)			
N. Perfluorodecanesulfonic acid (PFDS)			
O. Perfluorooctane Sulfonamide (FOSA)			
P. Perfluorobutanoic acid (PFBA)			
Q. Perfluoropentanoic acid (PFPeA)			
R. 6:2FTS			
S. 8:2 FTS			
T. N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)			
U. N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)			

VALIDATION FINDINGS WORKSHEET

Initial Calibration

Page: 1 of 1

Reviewer: 9

2nd Reviewer: _____

METHOD: LCMS PFCs

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?

Did the initial calibration meet the curve fit acceptance criteria of > 0.990 ?

Were all percent relative standard deviations (%RSD) $< 20\%$? 3570

Y(N) N/A Were all analytes within 70-130% or percent differences (%D) $\leq 30\%$ of their true value for each calibration standard?

[illegible]

LDC #: 29-9A96

VALIDATION FINDINGS WORKSHEET

BlanksPage: 1 of 1Reviewer: 92nd Reviewer: 0

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

- ☒ N N/A Were all samples associated with a given method blank?
- ☒ N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
- ☒ N N/A Was a method blank performed with each extraction batch?
- ☒ N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Blank extraction date: 5/1/18 Blank analysis date: 5/1/18Conc. units: ng/LAssociated samples: A11 anal 4

Compound	Blank ID	Sample Identification							
	<u>MB 200-1924/1A</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>				
<u>A</u>	<u>0.639</u>	<u>1.62/1.79</u>		<u>0.64/1.62</u>	<u>0.37/1.63</u>				
<u>A</u>	<u>0.616</u>		<u>1.13/1.68</u>	<u>0.58/1.62</u>	<u>0.51/1.63</u>				
<u>E</u>	<u>0.564</u>				<u>0.45/1.63</u>				
<u>K</u>	<u>0.704</u>	<u>1.73/1.79</u>	<u>1.27/1.68</u>	<u>0.47/1.62</u>	<u>0.59/1.62</u>				

Blank extraction date: _____ Blank analysis date: _____

Associated samples: _____

Conc. units: _____

Compound	Blank ID	Sample Identification							

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 129-9A96VALIDATION FINDINGS WORKSHEET
Field BlanksPage: 1 of 1Reviewer: 92nd Reviewer: a

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

☒ Y ☐ N ☐ N/A Were field blanks identified in this SDG?☒ Y ☐ N ☐ N/A Were target compounds detected in the field blanks?Blank units: 15/L Associated sample units: 15/LSampling date: 12/27/18Field blank type: (circle one) Trip Blank/Field Blank / Rinsate / Other: _____ Associated Samples: 1-3 anal 11

Compound	Blank ID	~~Blank ID~~	Sample Identification							
	<u>4</u>	<u>5</u>	<u>1</u>	<u>2</u>	<u>3</u>					
<u>Q</u>	<u>0.64</u>	<u>0.37</u>		<u>1.63/1.79</u>						
<u>A</u>	<u>0.58</u>	<u>0.51</u>			<u>1.13/1.68</u>					
<u>H</u>	<u>0.42</u>									
<u>K</u>	<u>0.47</u>	<u>0.59</u>	<u>41</u>	<u>1.73/1.79</u>	<u>1.27/1.68</u>					
<u>P</u>		<u>0.68</u>	<u>1.80/2.1</u>	<u>1.22/1.79</u>						
<u>E</u>		<u>0.45</u>	<u>1.80</u>							
<u>M</u>		<u>0.28</u>								

Blank units: _____ Associated sample units: _____

Sampling date: _____

Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: _____

Compound	Blank ID	~~Blank ID~~	Sample Identification							
<u>D</u>		<u>0.41</u>								
	<u>(<RL)</u>	<u>(<RL)</u>								

LDC# 4299A96VALIDATION FINDINGS WORKSHEET
Field DuplicatesPage: 1 of 1
Reviewer: [Signature]
2nd Reviewer: [Signature]

METHOD: LC/MS PFCs

Compound	Concentration (ug/L)		RPD
	2	3	
P	1.22	1.96	47
Q	1.62	2.34	36
A	2.23	1.13	65
B	1.56	1.53	2
C	3.23	3.44	6
D	0.57	0.30	62
J	1.19	0.93	25
K	1.73	1.22	35
M	2.86	2.77	3

VALIDATION FINDINGS WORKSHEET **Initial Calibration Calculation Verification**

Page: 1 of 1
 Reviewer: _____
 2nd Reviewer: C

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

A_x = Area of compound,

C_x = Concentration of compound,

S = Standard deviation of the RRFs

X = Mean of the RRFs

A_{is} = Area of associated internal standard

C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF (47.9 std)	RRF (47.9 std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	ICAL	5/11/18	8:2 FTS (1st internal standard)	0.8514	0.8514	0.7678	0.7678	33.8	33.8
	(LC410)		(2nd internal standard)						
			(3rd internal standard)						
2			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC#: 42929A96VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 1 of 3
Reviewer: 9
2nd Reviewer: 2

Method: LC/MS PFCs (EPA Method 537)

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
5/11/2018	LC410	PFOA	s1	1.200115	1.000
			s2	2.013875	2.000
			s3	5.544645	5.000
			s4	21.583565	20.000
			s5	53.982450	50.000
			s6	192.138190	200.000

Regression Output

Reported

Constant	1.698015	0.132700
Std Err of Y Est		
R Squared	0.999034	0.995000
Degrees of Freedom		
X Coefficient(s)	0.957823	1.033300
Std Err of Coef.		
Correlation Coefficient	0.999517	
Coefficient of Determination (r^2)	0.999034	0.995000

LDC#: 42929A96VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 2 of 3
Reviewer: [Signature]
2nd Reviewer: [Signature]

Method: LC/MS PFCs (EPA Method 537)

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
5/21/2018	LC410	PFOA	s1	1.13031	1.000
			s2	2.222395	2.000
			s3	5.020515	5.000
			s4	21.010405	20.000
			s5	50.875690	50.000
			s6	201.735980	200.000

Regression Output**Reported**

Constant	0.316253	0.122800
Std Err of Y Est		
R Squared	0.999984	0.999000
Degrees of Freedom		
X Coefficient(s)	1.007546	1.017400
Std Err of Coef.		
Correlation Coefficient	0.999992	
Coefficient of Determination (r^2)	0.999984	0.999000

LDC#: 42929A96VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 2 of 3
Reviewer: [Signature]
2nd Reviewer: [Signature]

Method: LC/MS PFCs (EPA Method 537)

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
5/21/2018	LC410	PFOS	s1	1.1142562	0.928
			s2	1.7291936	1.860
			s3	5.2323553	4.640
			s4	21.105913	18.600
			s5	51.738777	46.400
			s6	213.262430	186.000

Regression Output

Reported

Constant	-0.384408	0.007700
Std Err of Y Est		
R Squared	0.999953	0.990000
Degrees of Freedom		
X Coefficient(s)	1.147280	1.107800
Std Err of Coef.		
Correlation Coefficient	0.999977	
Coefficient of Determination (r^2)	0.999953	0.990000

VALIDATION FINDINGS WORKSHEET **Continuing Calibration Results Verification**

Page: ____ of ____
 Reviewer: ____
 2nd Reviewer:

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$$

Where: ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

A_x = Area of compound,

C_x = Concentration of compound,

A_{is} = Area of associated internal standard

C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported	Recalculated	Reported	Recalculated
					RRF (CC)	RRF (CC)	%D	%D
1	PF051018A33	5/11/18	PFOA (1st internal standard)	5.000	5.038	5.038	0.8	0.8
			8:2 FTS (2nd internal standard)	0.7678	0.7593	0.7593	1.1	1.1
2	PF051018A48	5/11/18	PFOA (1st internal standard)	5.000	5.006	5.006	0.1	0.1
			8:2 FTS (2nd internal standard)	0.7678	0.9099	0.9099	18.5	18.5
3	PF052218A07	5/22/18	PFOA (1st internal standard)	20.000	21.800	21.804	9.0	9.0
			PFOS (2nd internal standard)	18.600	18.030	18.027	2.9	3.1
4			(1st internal standard)					
			(2nd internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results

VALIDATION FINDINGS WORKSHEET Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 101
Reviewer: [Signature]
2nd Reviewer: [Signature]

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where: SSC = Spiked sample concentration
SA = Spike added

SC = Sample concentration

$$\text{RPD} = | \text{MSC} - \text{MSD} | * 2 / (\text{MSC} + \text{MSDC})$$

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD samples: 6/7

Compound	Spike Added (<u>13.1</u>)		Sample Concentration (<u>11.5</u> / <u>4</u>)	Spiked Sample Concentration (<u>11.5</u> / <u>4</u>)		Matrix Spike		Matrix Spike Duplicate		MS/MSD	
						Percent Recovery		Percent Recovery		RPD	
	MS	MSD		MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~PFOA~~	33.2	34.9	3.23	37.40	37.65	103	103	99	99	1	1
~~PFOS~~	30.8	31.4	2.86	32.97	33.52	98	98	95	95	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Recovery} = 100 * (\text{SC}/\text{SA})$$

Where: SSC = Spike concentration
SA = Spike added

$$RPD = |LCSC - LCSDC| * 2 / (LCSC + LCSDC)$$

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 200-129214

[illegible]

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

Page: 1 of 1
Reviewer: 9
2nd reviewer: 9

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_s)(I_s)(V_i)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

Example:

Sample I.D. 1, PFOA

$$\text{Conc.} = \frac{38386 \times 50}{6520 \text{ TB} - 0.132 \text{ T}} \times 0.5 \times 1$$

$$= \frac{1.9193}{1.033} \times 0.278$$

$$= 0.529 \text{ uS/L}$$

$$4.88$$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (μ l)
V_t	=	Volume of the concentrated extract in microliters (μ l)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

[illegible]

Site: Speonk Solvent Plume
Laboratory: TestAmerica, Inc., South Burlington, VT
Report No.: 200-43269-1
Reviewer: Pei Geng and Christina Rink/Laboratory Data Consultants for
Environmental Assessment & Remediations, Patchogue, NY
Date: August 29, 2018

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SP-81	200-43269-1	Fluorinated Alkyl Substances
SP-22P	200-43269-2	Fluorinated Alkyl Substances
SP-66D	200-43269-3	Fluorinated Alkyl Substances
SSP_EQUIPMENTBLANK 1_20180426	200-43269-4	Fluorinated Alkyl Substances
SSP_EQUIPMENTBLANK 2_20180426	200-43269-5	Fluorinated Alkyl Substances

Associated QC Samples(s):

Field/Trip Blanks: SSP_EQUIPMENTBLANK 1_20180426,
SSP_EQUIPMENTBLANK 2_20180426

Field Duplicate pair: None Associated

The above-listed water samples were collected on April 26, 2018 and were analyzed for fluorinated alkyl substances by method 537 modified. The data validation was performed in accordance with the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA 540-R-2017-002 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Labeled Compounds
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

LC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial Calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	ICAL %D	Associated Samples		Validation Action
05/11/18	CS-2	6:2FTS	32.3	SP-22P	X	J detects/UJ nondetects
		8:2FTS	58.7	SP-66D SSP_EQUIPMENTBLANK 1_20180426 SSP_EQUIPMENTBLANK 2_20180426	X	J detects/UJ nondetects
05/21/18	CS-2	6:2FTS	33.5	SP-81	X	UJ nondetects

- X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The 6:2FTS and 8:2FTS results for the samples listed above were estimated due to true value exceedances. The bias cannot be determined. The results can be used for project objectives as estimated values (J) or nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing calibration:

All criteria were met.

Blanks

Contamination was detected in the associated fluorinated alkyl substances method blank samples. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at the reporting limit (RL) for contaminants. The following table summarizes the contamination detected.

Blank ID	Compound	Level Detected	Action Level	Associated Samples
MB 200-129214/1-A	Perfluoropentanoic acid	0.639 ng/L	RL	SP-81
	Perfluorohexanoic acid	0.616 ng/L	RL	SP-22P
	Perfluorodecanoic acid	0.564 ng/L	RL	SP-66D
	Perfluorohexanesulfonic acid	0.704 ng/L	RL	SSP_EQUIPMENTBLANK 1_20180426 SSP_EQUIPMENTBLANK 2_20180426

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.
- If the sample concentration was > the RL and > the Action Level, qualification of the data was not required.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
SP-81	Perfluoropentanoic acid	0.49 ng/L	1.77U ng/L
SP-22P	Perfluorohexanesulfonic acid	0.99 ng/L	1.78U ng/L
SP-66D	Perfluoropentanoic acid	1.15 ng/L	1.81U ng/L
	Perfluorohexanesulfonic acid	1.08 ng/L	1.81U ng/L

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.

No positive results were found in the equipment blank samples SSP_EQUIPMENTBLANK 1_20180426 and SSP_EQUIPMENTBLANK 2_20180426 for fluorinated alkyl substances analysis.

MS/MSD Results

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

LCS Results

All criteria were met.

Labeled Compounds

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the fluorinated alkyl substances analysis.

Dilutions were not required for fluorinated alkyl substances analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

- U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified “J” data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The ‘J’ data may be biased high or low or the direction of the bias may be indeterminable.
- UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified “UJ” data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The ‘UJ’ data may be biased low.
- JN - The analysis indicates the presence of a compound that has been “tentatively identified” (N) and the associated numerical value represents its approximate (J) concentration.
- R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Burlington</u>	Job No.: <u>200-43269-1</u>
SDG No.: _____	
Client Sample ID: <u>SP-81</u>	Lab Sample ID: <u>200-43269-1</u>
Matrix: <u>Water</u>	Lab File ID: <u>PF052218A10.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>04/26/2018 09:35</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>05/07/2018 14:00</u>
Sample wt/vol: <u>283.1(mL)</u>	Date Analyzed: <u>05/22/2018 16:53</u>
Con. Extract Vol.: <u>0.5(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20(uL)</u>	GC Column: <u>C-18</u> ID: <u>4.6(mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>129759</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.77	U	1.77	0.39
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.49	J B	1.77	0.39
307-24-4	Perfluorohexanoic acid (PFHxA)	1.77	U	1.77	0.39
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.77	U	1.77	0.26
335-67-1	Perfluorooctanoic acid (PFOA)	1.77	U	1.77	0.42
375-95-1	Perfluorononanoic acid (PFNA)	1.77	U	1.77	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	1.77	U	1.77	0.39
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.77	U	1.77	0.39
307-55-1	Perfluorododecanoic acid (PFDoA)	1.77	U	1.77	0.39
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	1.77	U	1.77	0.39
376-06-7	Perfluorotetradecanoic acid (PFTeA)	1.77	U	1.77	0.39
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.77	U	1.77	0.78
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.77	U	1.77	0.25
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.77	U	1.77	0.39
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.77	U	1.77	0.26
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.77	U	1.77	0.39
754-91-6	Perfluorooctane Sulfonamide (FOSA)	1.77	U	1.77	0.39
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.77	U	1.77	0.53
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.77	U	1.77	0.53
27619-97-2	6:2FTS	1.77	U	1.77	0.53
39108-34-4	8:2FTS	1.77	U	1.77	0.53

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Initials: CR

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-43269-1
 SDG No.: _____
 Client Sample ID: SP-22P Lab Sample ID: 200-43269-2
 Matrix: Water Lab File ID: PF051018A52.d
 Analysis Method: 537 (modified) Date Collected: 04/26/2018 11:07
 Extraction Method: 3535 Date Extracted: 05/07/2018 14:00
 Sample wt/vol: 280.5(mL) Date Analyzed: 05/11/2018 21:39
 Con. Extract Vol.: 0.5(mL) Dilution Factor: 1
 Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 129349 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.28	J <u>J</u>	1.78	0.40
2706-90-3	Perfluoropentanoic acid (PFPeA)	2.32	B	1.78	0.40
307-24-4	Perfluorohexanoic acid (PFHxA)	1.99	B	1.78	0.40
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.21	J <u>J</u>	1.78	0.26
335-67-1	Perfluorooctanoic acid (PFOA)	17.2		1.78	0.42
375-95-1	Perfluorononanoic acid (PFNA)	1.78	U <u>U</u>	1.78	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	1.78	U	1.78	0.40
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.78	U	1.78	0.40
307-55-1	Perfluorododecanoic acid (PFDoA)	1.78	U	1.78	0.40
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	1.78	U	1.78	0.40
376-06-7	Perfluorotetradecanoic acid (PFTeA)	1.78	U	1.78	0.40
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.02	J <u>J</u>	1.78	0.78
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.99	J B <u>1.78 U</u>	1.78	0.25
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.78	U <u>U</u>	1.78	0.40
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	2.07		1.78	0.27
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.78	U <u>U</u>	1.78	0.40
754-91-6	Perfluorooctane Sulfonamide (FOSA)	1.78	U	1.78	0.40
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.78	U	1.78	0.53
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.78	U	1.78	0.53
27619-97-2	6:2FTS	1.78	U <u>UJ</u>	1.78	0.53
39108-34-4	8:2FTS	1.78	U <u>UJ</u>	1.78	0.53

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Initials: CR

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-43269-1
 SDG No.: _____
 Client Sample ID: SP-66D Lab Sample ID: 200-43269-3
 Matrix: Water Lab File ID: PF051018A53.d
 Analysis Method: 537 (modified) Date Collected: 04/26/2018 13:55
 Extraction Method: 3535 Date Extracted: 05/07/2018 14:00
 Sample wt/vol: 276.7(mL) Date Analyzed: 05/11/2018 21:55
 Con. Extract Vol.: 0.5(mL) Dilution Factor: 1
 Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 129349 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.83	J	1.81	0.40
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.15	J B	1.81	0.40
307-24-4	Perfluorohexanoic acid (PFHxA)	1.81	U	1.81	0.40
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.81	U	1.81	0.26
335-67-1	Perfluorooctanoic acid (PFOA)	1.81	U	1.81	0.42
375-95-1	Perfluorononanoic acid (PFNA)	1.81	U	1.81	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	1.81	U	1.81	0.40
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.81	U	1.81	0.40
307-55-1	Perfluorododecanoic acid (PFDoA)	1.81	U	1.81	0.40
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	1.81	U	1.81	0.40
376-06-7	Perfluorotetradecanoic acid (PFTeA)	1.81	U	1.81	0.40
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.81	U	1.81	0.80
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.08	J B	1.81	0.25
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.81	U	1.81	0.40
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.81	U	1.81	0.27
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.81	U	1.81	0.40
754-91-6	Perfluorooctane Sulfonamide (FOSA)	1.81	U	1.81	0.40
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.81	U	1.81	0.54
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.81	U	1.81	0.54
27619-97-2	6:2FTS	1.81	U	1.81	0.54
39108-34-4	8:2FTS	1.17	J	1.81	0.54

AUG 31 2018

Initials: *CR*

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-43269-1

SDG No.: _____

Client Sample ID: SSP EQUIPMENTBLANK Lab Sample ID: 200-43269-4
1 20180426

Matrix: Water Lab File ID: PF051018A54.d

Analysis Method: 537 (modified) Date Collected: 04/26/2018 14:00

Extraction Method: 3535 Date Extracted: 05/07/2018 14:00

Sample wt/vol: 285.2 (mL) Date Analyzed: 05/11/2018 22:11

Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 129349 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.75	U	1.75	0.39
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.75	U	1.75	0.39
307-24-4	Perfluorohexanoic acid (PFHxA)	1.75	U	1.75	0.39
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.75	U	1.75	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	1.75	U	1.75	0.41
375-95-1	Perfluorononanoic acid (PFNA)	1.75	U	1.75	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	1.75	U	1.75	0.39
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.75	U	1.75	0.39
307-55-1	Perfluorododecanoic acid (PFDoA)	1.75	U	1.75	0.39
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	1.75	U	1.75	0.39
376-06-7	Perfluorotetradecanoic acid (PFTeA)	1.75	U	1.75	0.39
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.75	U	1.75	0.77
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.75	U	1.75	0.25
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.75	U	1.75	0.39
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.75	U	1.75	0.26
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.75	U	1.75	0.39
754-91-6	Perfluorooctane Sulfonamide (FOSA)	1.75	U	1.75	0.39
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.75	U	1.75	0.53
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.75	U	1.75	0.53
27619-97-2	6:2FTS	1.75	U	1.75	0.53
39108-34-4	8:2FTS	1.75	U	1.75	0.53

AUG 31 2018

Initials: *CR*

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-43269-1

SDG No.: _____

Client Sample ID: SSP EQUIPMENTBLANK Lab Sample ID: 200-43269-5
2 20180426

Matrix: Water Lab File ID: PF051018A55.d

Analysis Method: 537 (modified) Date Collected: 04/26/2018 14:00

Extraction Method: 3535 Date Extracted: 05/07/2018 14:00

Sample wt/vol: 294.5 (mL) Date Analyzed: 05/11/2018 22:27

Con. Extract Vol.: 0.5 (mL) Dilution Factor: 1

Injection Volume: 20 (uL) GC Column: C-18 ID: 4.6 (mm)

% Moisture: _____ GPC Cleanup: (Y/N) N

Analysis Batch No.: 129349 Units: ng/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.70	U	1.70	0.38
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.70	U	1.70	0.38
307-24-4	Perfluorohexanoic acid (PFHxA)	1.70	U	1.70	0.38
375-85-9	Perfluoroheptanoic acid (PFHpA)	1.70	U	1.70	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	1.70	U	1.70	0.40
375-95-1	Perfluorononanoic acid (PFNA)	1.70	U	1.70	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	1.70	U	1.70	0.38
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.70	U	1.70	0.38
307-55-1	Perfluorododecanoic acid (PFDoA)	1.70	U	1.70	0.38
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	1.70	U	1.70	0.38
376-06-7	Perfluorotetradecanoic acid (PFTeA)	1.70	U	1.70	0.38
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.70	U	1.70	0.75
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.70	U	1.70	0.24
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.70	U	1.70	0.38
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.70	U	1.70	0.25
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.70	U	1.70	0.38
754-91-6	Perfluorooctane Sulfonamide (FOSA)	1.70	U	1.70	0.38
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.70	U	1.70	0.51
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.70	U	1.70	0.51
27619-97-2	6:2FTS	1.70	U	1.70	0.51
39108-34-4	8:2FTS	1.70	U	1.70	0.51

AUG 31 2018

Initials: CR

LDC #: 42929B96
 SDG #: 200-43269-1
 Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET

Category B

Date: 4/27/18
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: LC/MS Fluorinated Alkyl Substances (EPA Method 537-Modified)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	M/A	$R^2 = 0.997$ True ID / ICV = 30%
IV.	Continuing calibration	A	CCV = 30%
V.	Laboratory Blanks	M	
VI.	Field blanks	ND	EB = 4.5
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	A	
IX.	Laboratory control samples	A	LCS
X.	Field duplicates	N	
XI.	Labeled Compounds	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable
 N = Not provided/applicable
 SW = See worksheet

ND = No compounds detected
 R = Rinsate
 FB = Field blank

D = Duplicate
 TB = Trip blank
 EB = Equipment blank

SB=Source blank
 OTHER:

	Client ID	Lab ID	Matrix	Date
1	SP-81	200-43269-1	Water	04/26/18
2	SP-22P	200-43269-2	Water	04/26/18
3	SP-66D	200-43269-3	Water	04/26/18
4	SSP_EQUIPMENTBLANK 1_20180426	200-43269-4	Water	04/26/18
5	SSP_EQUIPMENTBLANK 2_20180426	200-43269-5	Water	04/26/18
6				
7				
8				

Notes:

Method: LC/MS PFOS/PFOAs (EPA Method 537M)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	☒	☐	☐	
Cooler temperature criteria was met.	☒	☐	☐	
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the specified criteria?	☒	☐	☐	
Were all samples analyzed within the 12 hour clock criteria?	☒	☐	☐	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	☒	☐	☐	
Were all percent relative standard deviations (%RSD) <u>25</u> ~~20~~ %?	☒	☐	☐	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?	☒	☐	☐	
Were the S/N ratio for all compounds within validation criteria?	☒	☐	☐	
Were all analytes within 70-130% or percent differences (%D) $\leq 30\%$ of their true value for each calibration standard?	☐	☒	☐	
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	☒	☐	☐	
Were all percent differences (%D) $\leq 30\%$	☒	☐	☐	
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	☒	☐	☐	
Were all percent differences (%D) $\leq 30\%$	☒	☐	☐	
Were the S/N ratio for all compounds within validation criteria?	☒	☐	☐	
Were all the retention times within the acceptance windows?	☒	☐	☐	
V. Laboratory Blanks				
Was a method blank associated with every sample in this SDG?	☒	☐	☐	
Was a method blank analyzed for each matrix and concentration?	☒	☐	☐	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	☒	☐	☐	
VI. Field blanks				
Field blanks were identified in this SDG.	☒	☐	☐	
Target compounds were detected in the field blanks.	☐	☒	☐	
VII. Surrogate spikes				
Were all surrogate %R within the QC limits?	☐	☒	☐	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	☐	☐	☒	
VIII. Matrix spike/Matrix spike duplicates				

LDC #: 499B96

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: [Signature]
2nd Reviewer: [Signature]

Validation Area	Yes	No	NA	Findings/Comments
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	☒	☐	☐	
Was a MS/MSD analyzed every 20 samples of each matrix?	☒	☐	☐	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	☒	☐	☐	
IV. Laboratory control samples				
Was an LCS analyzed for this SDG?	☒	☐	☐	
Was an LCS analyzed per extraction batch?	☒	☐	☐	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	☒	☐	☐	
X. Field duplicates				
Field duplicate pairs were identified in this SDG.	☐	☒	☐	
Target compounds were detected in the field duplicates.	☐	☐	☒	
XI. Internal standards				
Were internal standard area counts within acceptance limits?	☒	☐	☐	
XII. Target compound identification				
Were the retention times of reported detects within the RT windows?	☒	☐	☐	
XIII. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	☒	☐	☐	
XIV. System performance				
System performance was found to be acceptable.	☒	☐	☐	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	☒	☐	☐	

TARGET COMPOUND WORKSHEET

METHOD: PFOS/PFOAs

A. Perfluorohexanoic acid (PFHxA)			
B. Perfluoroheptanoic acid (PFHpA)			
C. Perfluorooctanoic acid (PFOA)			
D. Perfluorononanoic acid (PFNA)			
E. Perfluorodecanoic acid (PFDA)			
F. Perfluoroundecanoic acid (PFUnA)			
G. Perfluorododecanoic acid (PFDoA)			
H. Perfluorotridecanoic acid (PFTriDA)			
I. Perfluorotetradecanoic acid (PFTeDA)			
J. Perfluorobutanesulfonic acid (PFBS)			
K. Perfluorohexanesulfonic acid (PFHxS)			
L. Perfluoroheptanesulfonic acid (PFHpS)			
M. Perfluorooctanesulfonic acid (PFOS)			
N. Perfluorodecanesulfonic acid (PFDS)			
O. Perfluorooctane Sulfonamide (FOSA)			
P. Perfluorobutanoic acid (PFBA)			
Q. Perfluoropentanoic acid (PFPeA)			
R. 6:2 FTS			
S. 8:2 FTS			
T. N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)			
U. N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)			

METHOD: LCMS PFCs

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Did the laboratory perform a 5 point calibration prior to sample analysis?

Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?

~~Y/N~~ N/A Were all percent relative standard deviations (%RSD) $\leq 20\%$?

Y N N/A Were all analytes within 70-130% or percent differences (%D) $\leq 30\%$ of their true value for each calibration standard?

[illegible]

LDC #: 12929B96

VALIDATION FINDINGS WORKSHEET

BlanksPage: 1 of 1Reviewer: Q2nd Reviewer: a**METHOD:** LC/MS PFOS/PFOAs (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

- ☒ Y ☐ N ☐ N/A Were all samples associated with a given method blank?
- ☒ Y ☐ N ☐ N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
- ☒ Y ☐ N ☐ N/A Was a method blank performed with each extraction batch?
- ☒ Y ☐ N ☐ N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Blank extraction date: 5/11/18 Blank analysis date: 5/11/18Conc. units: ng/LAssociated samples: 511 Qual 1

Compound	Blank ID	Sample Identification							
	<u>MB 200-129214/1-A</u>	<u>1</u>	<u>2</u>	<u>3</u>					
<u>Q</u>	<u>0.639</u>	<u>0.49/1.1</u>		<u>1.15/1.8</u>					
<u>A</u>	<u>0.616</u>								
<u>E</u>	<u>0.564</u>								
<u>K</u>	<u>0.704</u>		<u>0.99/1.8</u>	<u>1.08/1.8</u>					
	<u>(<u><P.L.</u>)</u>								

Blank extraction date: _____ Blank analysis date: _____

Associated samples: _____

Conc. units: _____

Compound	Blank ID	Sample Identification							

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:

All contaminants within five times the method blank concentration were qualified as not detected, "U".

VALIDATION FINDINGS WORKSHEET **Initial Calibration Calculation Verification**

Page: 1 of 1
 Reviewer: _____
 2nd Reviewer: Q

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

A_x = Area of compound,

C_x = Concentration of compound,

S = Standard deviation of the RRFs

X = Mean of the RRFs

A_{is} = Area of associated internal standard

C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF (47.9 std)	RRF (47.9 std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	ICAL (LC410)	5/11/18	8:2 FTS (1st internal standard)	0.8514	0.8514	0.7678	0.7678	33.8	33.8
			(2nd internal standard)						
			(3rd internal standard)						
2			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC#: 42929A96VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 1 of 3
Reviewer: [Signature]
2nd Reviewer: [Signature]

Method: LC/MS PFCs (EPA Method 537)

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
5/11/2018	LC410	PFOA	s1	1.200115	1.000
			s2	2.013875	2.000
			s3	5.544645	5.000
			s4	21.583565	20.000
			s5	53.982450	50.000
			s6	192.138190	200.000

Regression Output

Reported

Constant	1.698015	0.132700
Std Err of Y Est		
R Squared	0.999034	0.995000
Degrees of Freedom		
X Coefficient(s)	0.957823	1.033300
Std Err of Coef.		
Correlation Coefficient	0.999517	
Coefficient of Determination (r^2)	0.999034	0.995000

LDC#: 429296VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 2 of 3
Reviewer: [Signature]
2nd Reviewer: [Signature]

Method: LC/MS PFCs (EPA Method 537)

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
5/21/2018	LC410	PFOA	s1	1.13031	1.000
			s2	2.222395	2.000
			s3	5.020515	5.000
			s4	21.010405	20.000
			s5	50.875690	50.000
			s6	201.735980	200.000

Regression Output

Reported

Constant	0.316253	0.122800
Std Err of Y Est		
R Squared	0.999984	0.999000
Degrees of Freedom		
X Coefficient(s)	1.007546	1.017400
Std Err of Coef.		
Correlation Coefficient	0.999992	
Coefficient of Determination (r^2)	0.999984	0.999000

LDC#: 42929B96VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 3 of 3
Reviewer: [Signature]
2nd Reviewer: [Signature]

Method: LC/MS PFCs (EPA Method 537)

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
5/21/2018	LC410	PFOS	s1	1.1142562	0.928
			s2	1.7291936	1.860
			s3	5.2323553	4.640
			s4	21.105913	18.600
			s5	51.738777	46.400
			s6	213.262430	186.000

Regression Output**Reported**

Constant	-0.384408	0.007700
Std Err of Y Est		
R Squared	0.999953	0.990000
Degrees of Freedom		
X Coefficient(s)	1.147280	1.107800
Std Err of Coef.		
Correlation Coefficient	0.999977	
Coefficient of Determination (r^2)	0.999953	0.990000

VALIDATION FINDINGS WORKSHEET **Continuing Calibration Results Verification**

Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = $100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$

$\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

A_x = Area of compound,

C_x = Concentration of compound,

A_{is} = Area of associated internal standard

C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported	Recalculated	Reported	Recalculated
					RRF (CC)	RRF (CC)	%D	%D
1	PF051018A33	5/11/18	PFOA (1st internal standard)	5.000	5.038	5.038	0.8	0.8
			8:2 FTS (2nd internal standard)	0.7678	0.7593	0.7593	1.1	1.1
2	PF051018A48	5/11/18	PFOA (1st internal standard)	5.000	5.006	5.006	0.1	0.1
			8:2 FTS (2nd internal standard)	0.7678	0.9099	0.9099	18.5	18.5
3	PF052218A07	5/22/18	PFOA (1st internal standard)	20.000	21.800	21.804	9.0	9.0
			PFOS (2nd internal standard)	18.600	18.030	18.027	2.9	3.1
4			(1st internal standard)					
			(2nd internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Recovery} = 100 * (\text{SC}/\text{SA})$$

Where: SSC = Spike concentration
SA = Spike added

$$RPD = |LCSC - LCSDC| * 2 / (LCSC + LCSDC)$$

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 200-29214/2-A

[illegible]

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

Page: 1 of 1

Reviewer: Q

2nd reviewer: _____

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_s)(I_s)(V_i)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 2, FFDA:

$$\text{Conc.} = \frac{\left[\frac{198.89 \times 50 \times 0.132}{98.886} - 0.128 \right] (0.5) (1)}{(1.0333) (0.805) () ()}$$

$$= 17.2 \text{ ns/L}$$
[illegible]

Site: Speonk Solvent Plume
Laboratory: TestAmerica, Inc., South Burlington, VT
Report No.: 200-43271-1
Reviewer: Pei Geng and Christina Rink/Laboratory Data Consultants for
Environmental Assessment & Remediations, Patchogue, NY
Date: August 29, 2018

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SP-50M	200-43271-1	Fluorinated Alkyl Substances
SP-5A	200-43271-2	Fluorinated Alkyl Substances
SP-A	200-43271-3	Fluorinated Alkyl Substances

Associated QC Samples(s):

Field/Trip Blanks: None Associated

Field Duplicate pair: None Associated

The above-listed water samples were collected on April 30, 2018 and were analyzed for fluorinated alkyl substances by method 537 modified. The data validation was performed in accordance with the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA 540-R-2017-002 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Labeled Compounds
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

LC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial Calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	ICAL %D	Associated Samples		Validation Action
05/11/18	CS-2	6:2FTS	32.3	SP-50M	X	UJ nondetects
		8:2FTS	58.7	SP-5A SP-A	X	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 35; estimate (J/UJ) positive and nondetect results.

XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.

SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.

+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The 6:2FTS and 8:2FTS results were estimated due to true value exceedances. The bias cannot be determined. The results can be used for project objectives as nondetects with estimated quantitation limits (UJ) which may have a minor impact on the data usability.

Continuing calibration:

All criteria were met.

Blanks

Contamination was detected in the associated fluorinated alkyl substances method blank samples. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at the reporting limit (RL) for contaminants. The following table summarizes the contamination detected.

Blank ID	Compound	Level Detected	Action Level	Associated Samples
MB 200-129214/1-A	Perfluoropentanoic acid	0.639 ng/L	RL	SP-50M
	Perfluorohexanoic acid	0.616 ng/L	RL	SP-5A
	Perfluorodecanoic acid	0.564 ng/L	RL	SP-A
	Perfluorohexanesulfonic acid	0.704 ng/L	RL	

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.
- If the sample concentration was > the RL and > the Action Level, qualification of the data was not required.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
SP-50M	Perfluoropentanoic acid	0.82 ng/L	1.73U ng/L
	Perfluorodecanoic acid	0.61 ng/L	1.73U ng/L
	Perfluorohexanesulfonic acid	0.53 ng/L	1.73U ng/L
SP-5A	Perfluoropentanoic acid	0.77 ng/L	1.77U ng/L
	Perfluorohexanoic acid	0.80 ng/L	1.77U ng/L
	Perfluorodecanoic acid	0.56 ng/L	1.77U ng/L
	Perfluorohexanesulfonic acid	1.07 ng/L	1.77U ng/L
SP-A	Perfluorohexanoic acid	1.11 ng/L	1.71U ng/L
	Perfluorohexanesulfonic acid	0.96 ng/L	1.71U ng/L

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.

A field blank was not associated with this sample set. Validation action was not required on this basis.

MS/MSD Results

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

LCS Results

All criteria were met.

Labeled Compounds

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the fluorinated alkyl substances analysis.

Dilutions were not required for fluorinated alkyl substances analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

- U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified “J” data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The ‘J’ data may be biased high or low or the direction of the bias may be indeterminable.
- UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified “UJ” data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The ‘UJ’ data may be biased low.
- JN - The analysis indicates the presence of a compound that has been “tentatively identified” (N) and the associated numerical value represents its approximate (J) concentration.
- R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Burlington</u>	Job No.: <u>200-43271-1</u>
SDG No.: _____	
Client Sample ID: <u>SP-50M</u>	Lab Sample ID: <u>200-43271-1</u>
Matrix: <u>Water</u>	Lab File ID: <u>PF051018A56.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>04/30/2018 10:40</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>05/07/2018 14:00</u>
Sample wt/vol: <u>289.4 (mL)</u>	Date Analyzed: <u>05/11/2018 22:43</u>
Con. Extract Vol.: <u>0.5 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>C-18</u> ID: <u>4.6 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>129349</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	3.00		1.73	0.38
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.82	J B 1.73U	1.73	0.38
307-24-4	Perfluorohexanoic acid (PFHxA)	2.10	B	1.73	0.38
375-85-9	Perfluoroheptanoic acid (PFHpA)	3.37		1.73	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	129		1.73	0.41
375-95-1	Perfluorononanoic acid (PFNA)	0.33	J	1.73	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	0.61	J B 1.73U	1.73	0.38
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.73	U	1.73	0.38
307-55-1	Perfluorododecanoic acid (PFDoA)	1.73	U	1.73	0.38
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	1.73	U	1.73	0.38
376-06-7	Perfluorotetradecanoic acid (PFTeA)	1.73	U	1.73	0.38
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.73	U	1.73	0.76
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.53	J B 1.73U	1.73	0.24
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.73	U	1.73	0.38
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.73	U	1.73	0.26
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.73	U	1.73	0.38
754-91-6	Perfluorooctane Sulfonamide (FOSA)	1.73	U	1.73	0.38
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.73	U	1.73	0.52
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.73	U	1.73	0.52
27619-97-2	6:2FTS	1.73	U	1.73	0.52
39108-34-4	8:2FTS	1.73	U	1.73	0.52

AUG 31 2018

Initials: *CR*

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Burlington</u>	Job No.: <u>200-43271-1</u>
SDG No.: _____	
Client Sample ID: <u>SP-5A</u>	Lab Sample ID: <u>200-43271-2</u>
Matrix: <u>Water</u>	Lab File ID: <u>PF051018A57.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>04/30/2018 12:58</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>05/07/2018 14:00</u>
Sample wt/vol: <u>282.9(mL)</u>	Date Analyzed: <u>05/11/2018 23:00</u>
Con. Extract Vol.: <u>0.5(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20(uL)</u>	GC Column: <u>C-18</u> ID: <u>4.6(mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>129349</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.79	J <u>J</u>	1.77	0.39
2706-90-3	Perfluoropentanoic acid (PFPeA)	0.77	J B <u>1.77U</u>	1.77	0.39
307-24-4	Perfluorohexanoic acid (PFHxA)	0.80	J B <u>1.77U</u>	1.77	0.39
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.42	J <u>J</u>	1.77	0.26
335-67-1	Perfluorooctanoic acid (PFOA)	2.75		1.77	0.42
375-95-1	Perfluorononanoic acid (PFNA)	0.32	J <u>J</u>	1.77	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	0.56	J B <u>1.77U</u>	1.77	0.39
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.77	U <u>U</u>	1.77	0.39
307-55-1	Perfluorododecanoic acid (PFDoA)	1.77	U <u>U</u>	1.77	0.39
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	0.47	J <u>J</u>	1.77	0.39
376-06-7	Perfluorotetradecanoic acid (PFTeA)	1.77	U <u>U</u>	1.77	0.39
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.67	J <u>J</u>	1.77	0.78
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.07	J B <u>1.77U</u>	1.77	0.25
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	0.53	J <u>J</u>	1.77	0.39
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.77	U <u>U</u>	1.77	0.27
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.77	U <u>U</u>	1.77	0.39
754-91-6	Perfluorooctane Sulfonamide (FOSA)	1.77	U <u>U</u>	1.77	0.39
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.77	U <u>U</u>	1.77	0.53
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.77	U <u>U</u>	1.77	0.53
27619-97-2	6:2FTS	1.77	U <u>U</u>	1.77	0.53
39108-34-4	8:2FTS	1.77	U <u>U</u>	1.77	0.53

AUG 31 2018

Initials: CR

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Burlington</u>	Job No.: <u>200-43271-1</u>
SDG No.: _____	
Client Sample ID: <u>SP-A</u>	Lab Sample ID: <u>200-43271-3</u>
Matrix: <u>Water</u>	Lab File ID: <u>PF051018A58.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>04/30/2018 00:00</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>05/07/2018 14:00</u>
Sample wt/vol: <u>292 (mL)</u>	Date Analyzed: <u>05/11/2018 23:16</u>
Con. Extract Vol.: <u>0.5 (mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20 (uL)</u>	GC Column: <u>C-18</u> ID: <u>4.6 (mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>129349</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	0.47	J	1.71	0.38
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.71	U	1.71	0.38
307-24-4	Perfluorohexanoic acid (PFHxA)	1.11	J B	1.71	0.38
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.43	J	1.71	0.25
335-67-1	Perfluorooctanoic acid (PFOA)	2.68		1.71	0.40
375-95-1	Perfluorononanoic acid (PFNA)	1.71	U	1.71	0.22
335-76-2	Perfluorodecanoic acid (PFDA)	1.71	U	1.71	0.38
2058-94-8	Perfluoroundecanoic acid (PFUnA)	1.71	U	1.71	0.38
307-55-1	Perfluorododecanoic acid (PFDoA)	1.71	U	1.71	0.38
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	1.71	U	1.71	0.38
376-06-7	Perfluorotetradecanoic acid (PFTeA)	1.71	U	1.71	0.38
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.71	U	1.71	0.75
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	0.96	J B	1.71	0.24
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.71	U	1.71	0.38
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	1.71	U	1.71	0.26
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.71	U	1.71	0.38
754-91-6	Perfluorooctane Sulfonamide (FOSA)	1.71	U	1.71	0.38
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.71	U	1.71	0.51
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.71	U	1.71	0.51
27619-97-2	6:2FTS	1.71	U	1.71	0.51
39108-34-4	8:2FTS	1.71	U	1.71	0.51

AUG 31 2018

Initials: *CR*

LDC #: 42929C96
 SDG #: 200-43271-1
 Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET Category B

Date: 8/7/18
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: LC/MS Fluorinated Alkyl Substances (EPA Method 537-Modified)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	SW/A	RSO ≤ 30%. Y ² True/OD ≤ 30%. ICV ≤ 30%
IV.	Continuing calibration	A	CCV ≤ 30%
V.	Laboratory Blanks	SW	
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	A	
IX.	Laboratory control samples	A	ICS
X.	Field duplicates	N	
XI.	Labeled Compounds	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable
 N = Not provided/applicable
 SW = See worksheet

ND = No compounds detected
 R = Rinsate
 FB = Field blank

D = Duplicate
 TB = Trip blank
 EB = Equipment blank

SB=Source blank
 OTHER:

	Client ID	Lab ID	Matrix	Date
1	SP-50M	200-43271-1	Water	04/30/18
2	SP-5A	200-43271-2	Water	04/30/18
3	SP-A	200-43271-3	Water	04/30/18
4				
5				
6				
7				
8				

Notes:

Method: LC/MS PFOS/PFOAs (EPA Method 537M)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	☒	☐	☐	
Cooler temperature criteria was met.	☒	☐	☐	
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the specified criteria?	☒	☐	☐	
Were all samples analyzed within the 12 hour clock criteria?	☒	☐	☐	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	☒	☐	☐	
Were all percent relative standard deviations (%RSD) $\leq 20\%$? <u>35%</u>	☒	☐	☐	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?	☒	☐	☐	
Were the S/N ratio for all compounds within validation criteria?	☒	☐	☐	
Were all analytes within 70-130% or percent differences (%D) $\leq 30\%$ of their true value for each calibration standard?	☐	☒	☐	
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	☒	☐	☐	
Were all percent differences (%D) $\leq 30\%$	☒	☐	☐	
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	☒	☐	☐	
Were all percent differences (%D) $\leq 30\%$	☒	☐	☐	
Were the S/N ratio for all compounds within validation criteria?	☒	☐	☐	
Were all the retention times within the acceptance windows?	☒	☐	☐	
V. Laboratory Blanks				
Was a method blank associated with every sample in this SDG?	☒	☐	☐	
Was a method blank analyzed for each matrix and concentration?	☒	☐	☐	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	☒	☐	☐	
VI. Field blanks				
Field blanks were identified in this SDG.	☐	☒	☐	
Target compounds were detected in the field blanks.	☐	☐	☒	
VII. Surrogate spikes				
Were all surrogate %R within the QC limits?	☐	☐	☒	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	☐	☐	☒	
VIII. Matrix spike/Matrix spike duplicates				

LDC #: 4299C96

VALIDATION FINDINGS CHECKLIST

Page: 3 of 7
Reviewer: [Signature]
2nd Reviewer: [Signature]

Validation Area	Yes	No	NA	Findings/Comments
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	☒	☐	☐	
Was a MS/MSD analyzed every 20 samples of each matrix?	☒	☐	☐	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	☒	☐	☐	
IV. Laboratory control samples				
Was an LCS analyzed for this SDG?	☒	☐	☐	
Was an LCS analyzed per extraction batch?	☒	☐	☐	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	☒	☐	☐	
X. Field duplicates				
Field duplicate pairs were identified in this SDG.	☐	☒	☐	
Target compounds were detected in the field duplicates.	☐	☐	☒	
XI. Internal standards				
Were internal standard area counts within acceptance limits?	☒	☐	☐	
XII. Target compound identification				
Were the retention times of reported detects within the RT windows?	☒	☐	☐	
XIII. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	☒	☐	☐	
XIV. System performance				
System performance was found to be acceptable.	☒	☐	☐	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	☒	☐	☐	

TARGET COMPOUND WORKSHEET

METHOD: PFOS/PFOAs

A. Perfluorohexanoic acid (PFHxA)			
B. Perfluoroheptanoic acid (PFHpA)			
C. Perfluorooctanoic acid (PFOA)			
D. Perfluorononanoic acid (PFNA)			
E. Perfluorodecanoic acid (PFDA)			
F. Perfluoroundecanoic acid (PFUnA)			
G. Perfluorododecanoic acid (PFDoA)			
H. Perfluorotridecanoic acid (PFTriDA)			
I. Perfluorotetradecanoic acid (PFTeDA)			
J. Perfluorobutanesulfonic acid (PFBS)			
K. Perfluorohexanesulfonic acid (PFHxS)			
L. Perfluoroheptanesulfonic acid (PFHpS)			
M. Perfluorooctanesulfonic acid (PFOS)			
N. Perfluorodecanesulfonic acid (PFDS)			
O. Perfluorooctane Sulfonamide (FOSA)			
P. Perfluorobutanoic acid (PFBA)			
Q. Perfluoropentanoic acid (PFPeA)			
R. 6:2 FTS			
S. 8:2 FTS			
T. N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)			
U. N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)			

METHOD: LCMS PFCs

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

☒ Y ☐ N ☐ N/A Did the laboratory perform a 5 point calibration prior to sample analysis?
☒ Y ☐ N ☐ N/A Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?
☒ Y ☐ N ☐ N/A Were all percent relative standard deviations (%RSD) $\leq 20\%$? **35%**
☒ Y ☐ N ☐ N/A Were all analytes within 70-130% or percent differences (%D) $\leq 30\%$ of their true values?

[illegible]

LDC #: 129c96

VALIDATION FINDINGS WORKSHEET

BlanksPage: 1 of 1Reviewer: 92nd Reviewer: 2**METHOD:** LC/MS PFOS/PFOAs (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

- ☒ N N/A Were all samples associated with a given method blank?
- ☒ N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
- ☒ N N/A Was a method blank performed with each extraction batch?
- ☒ N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Blank extraction date: 5/1/18 Blank analysis date: 5/11/18Conc. units: ng/L Associated samples: All

Compound	Blank ID	Sample Identification							
	<u>MB 200-129714/1A</u>	<u>1</u>	<u>2</u>	<u>3</u>					
<u>Q</u>	<u>0.639</u>	<u>0.82/1.13</u>	<u>0.11/1.11</u>						
<u>A</u>	<u>0.616</u>		<u>0.80/1.11</u>	<u>1.11/1.11</u>					
<u>E</u>	<u>0.564</u>	<u>0.51/1.13</u>	<u>0.56/1.11</u>						
<u>K</u>	<u>0.704</u>	<u>0.53/1.13</u>	<u>1.01/1.11</u>	<u>0.96/1.11</u>					
	<u>(<u><RL</u>)</u>								

Blank extraction date: _____ Blank analysis date: _____

Associated samples: _____

Conc. units: _____

Compound	Blank ID	Sample Identification							

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:

All contaminants within five times the method blank concentration were qualified as not detected, "U".

VALIDATION FINDINGS WORKSHEET **Initial Calibration Calculation Verification**

Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

A_x = Area of compound,

C_x = Concentration of compound,

S = Standard deviation of the RRFs

X = Mean of the RRFs

A_{is} = Area of associated internal standard

C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF (47.9 std)	RRF (47.9 std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	ICAL (LC410)	5/11/18	8:2 FTS (1st internal standard)	0.8514	0.8514	0.7678	0.7678	33.8	33.8
			(2nd internal standard)						
			(3rd internal standard)						
2			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC#: 42929A96VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 1 of 1
Reviewer: Q
2nd Reviewer: Q

Method: LC/MS PFCs (EPA Method 537)

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
5/11/2018	LC410	PFOA	s1	1.200115	1.000
			s2	2.013875	2.000
			s3	5.544645	5.000
			s4	21.583565	20.000
			s5	53.982450	50.000
			s6	192.138190	200.000

Regression Output

Reported

Constant	1.698015	0.132700
Std Err of Y Est		
R Squared	0.999034	0.995000
Degrees of Freedom		
X Coefficient(s)	0.957823	1.033300
Std Err of Coef.		
Correlation Coefficient	0.999517	
Coefficient of Determination (r^2)	0.999034	0.995000

VALIDATION FINDINGS WORKSHEET **Continuing Calibration Results Verification**

Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = $100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$

$\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

A_x = Area of compound,

C_x = Concentration of compound,

A_{is} = Area of associated internal standard

C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported	Recalculated	Reported	Recalculated
					RRF (CC)	RRF (CC)	%D	%D
1	PF051018A33	5/11/18	PFOA (1st internal standard)	5.000	5.038	5.038	0.8	0.8
			8:2 FTS (2nd internal standard)	0.7678	0.7593	0.7593	1.1	1.1
2	PF051018A48	5/11/18	PFOA (1st internal standard)	5.000	5.006	5.006	0.1	0.1
			8:2 FTS (2nd internal standard)	0.7678	0.9099	0.9099	18.5	18.5
3			(1st internal standard)					
			(2nd internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification**METHOD:** LC/MS PFOS/PFOAs (EPA Method 537M)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * (SC/SA)$

Where: SSC = Spike concentration
SA = Spike added

RPD = $|LCSC - LCSDC| * 2 / (LCSC + LCSDC)$

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 200-127214/2A

Compound	Spike Added (<u>115/L</u>)		Spike Concentration (<u>115/L</u>)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
~~PFOA~~	40.0	NA	39.49	NA	99	99				
~~PFOS~~	37.1	V	35.16	V	95	95				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_1 = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 1, PTA

$$\text{Conc.} = \left(\frac{553061 \times 50}{358914} - 0.1327 \right) \times 0.5 \times 1$$

$$= 128.6 \text{ ng/L}$$

[illegible]

Site: Speonk Solvent Plume
Laboratory: TestAmerica, Inc., South Burlington, VT
Report No.: 200-43680-1
Reviewer: Pei Geng and Christina Rink/Laboratory Data Consultants for
Environmental Assessment & Remediations, Patchogue, NY
Date: August 29, 2018

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
GARDEN_DEPT	200-43680-1	Fluorinated Alkyl Substances
GARDEN_DEPTMS	200-43680-1MS	Fluorinated Alkyl Substances
GARDEN_DEPTMSD	200-43680-1MSD	Fluorinated Alkyl Substances

Associated QC Samples(s):

Field/Trip Blanks: None Associated

Field Duplicate pair: None Associated

The above-listed water sample was collected on June 1, 2018 and was analyzed for fluorinated alkyl substances by method 537 modified. The data validation was performed in accordance with the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA 540-R-2017-002 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Liquid Chromatography/Mass Spectrometry (LC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Labeled Compounds
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported or usable with minor qualification due to laboratory quality control outliers.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

LC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

Initial Calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	ICAL %D	Associated Samples		Validation Action
06/06/18	CS-2	Perfluoroheptanesulfonic acid	34.3	GARDEN DEPT	X	UJ nondetects

X = Initial calibration (IC) relative standard deviation (%RSD) > 35; estimate (J/UJ) positive and nondetect results.

XX = Continuing calibration (CC) percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.

SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.

+ = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The perfluoroheptanesulfonic acid result was estimated due to true value exceedance. The bias cannot be determined. The result can be used for project objectives as a nondetect with an estimated quantitation limit (UJ) which may have a minor impact on the data usability.

Continuing calibration:

Compounds that did not meet criteria are summarized in the following table.

Date	Instrument ID	Compound	ICAL %D	Associated Samples		Validation Action
06/14/18	PF061318A28	13C5-Perfluorononanoic acid	31.3	GARDEN DEPT	XX	J detects

- X = Initial calibration (IC) relative standard deviation (%RSD) > 20; estimate (J/UJ) positive and nondetect results.
 XX = Continuing calibration (CC) percent difference (%D) > 20; estimate (J/UJ) positive and nondetect results.
 SS = Second source verification percent difference (%D) > 30; estimate (J/UJ) positive and nondetect results.
 + = Response factor (RRF) < validation criteria; estimate (J/UJ) positive and nondetect results.

The perfluorononanoic acid result was estimated due to continuing calibration exceedance. The bias cannot be determined. The result can be used for project objectives as a nondetect with an estimated quantitation limit (UJ) which may have a minor impact on the data usability.

Blanks

Contamination was detected in the associated fluorinated alkyl substances method blank samples. The presence of blank contamination indicates that false positives may exist for these compounds in the associated samples. Action Levels (ALs) were established at the reporting limit (RL) for contaminants. The following table summarizes the contamination detected.

Blank ID	Compound	Level Detected	Action Level	Associated Samples
MB 200-130355/1-A	Perfluoropentanoic acid	1.102 ng/L	RL	GARDEN_DEPT
	Perfluorohexanoic acid	0.905 ng/L	RL	
	Perfluoroheptanoic acid	0.372 ng/L	RL	
	Perfluorooctanoic acid	0.733 ng/L	RL	
	Perfluorohexanesulfonic acid	1.399 ng/L	RL	
	Perfluoroheptanesulfonic acid	0.477 ng/L	RL	
	Perfluorooctane sulfonamide	0.679 ng/L	RL	
	8:2FTS	0.915 ng/L	RL	

Sample results were qualified as follows:

- If sample concentration was < the reporting limit (RL) and ≤ the Action Level, qualify the result as a nondetect (U) at the RL.
- If sample concentration was > the RL and ≤ the Action Level, qualify the result as not detected (U) at the reported concentration.
- If the sample concentration was > the RL and > the Action Level, qualification of the data was not required.

Qualified sample results are listed in the table below.

Sample ID	Compound	Level Detected	Validation Action
GARDEN_DEPT	Perfluoropentanoic acid	1.44 ng/L	1.78U ng/L
	Perfluorohexanoic acid	1.31 ng/L	1.78U ng/L
	Perfluoroheptanoic acid	0.45 ng/L	1.78U ng/L
	Perfluorooctanoic acid	0.66 ng/L	1.78U ng/L
	Perfluorohexanesulfonic acid	1.18 ng/L	1.78U ng/L
	Perfluorooctane sulfonamide	0.63 ng/L	1.78U ng/L
	8:2FTS	0.96 ng/L	1.78U ng/L

These results can be used for project objectives as nondetects (U) which may have a minor impact on the data usability.

A field blank was not associated with this sample set. Validation action was not required on this basis.

MS/MSD Results

MS/MSD analyses were performed on sample GARDEN_DEPT for fluorinated alkyl substances analysis. All criteria were met.

LCS Results

All criteria were met.

Labeled Compounds

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the method detection limit (MDL) in the fluorinated alkyl substances analysis.

Dilutions were not required for fluorinated alkyl substances analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

- U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified “J” data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The ‘J’ data may be biased high or low or the direction of the bias may be indeterminable.
- UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified “UJ” data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The ‘UJ’ data may be biased low.
- JN - The analysis indicates the presence of a compound that has been “tentatively identified” (N) and the associated numerical value represents its approximate (J) concentration.
- R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

FORM I
LCMS ORGANICS ANALYSIS DATA SHEET

Lab Name: <u>TestAmerica Burlington</u>	Job No.: <u>200-43680-1</u>
SDG No.: _____	
Client Sample ID: <u>GARDEN_DEPT</u>	Lab Sample ID: <u>200-43680-1</u>
Matrix: <u>Water</u>	Lab File ID: <u>PF061318A35.d</u>
Analysis Method: <u>537 (modified)</u>	Date Collected: <u>06/01/2018 08:50</u>
Extraction Method: <u>3535</u>	Date Extracted: <u>06/07/2018 14:15</u>
Sample wt/vol: <u>280.2(mL)</u>	Date Analyzed: <u>06/14/2018 06:34</u>
Con. Extract Vol.: <u>0.5(mL)</u>	Dilution Factor: <u>1</u>
Injection Volume: <u>20(uL)</u>	GC Column: <u>C-18</u> ID: <u>4.6(mm)</u>
% Moisture: _____	GPC Cleanup: (Y/N) <u>N</u>
Analysis Batch No.: <u>130595</u>	Units: <u>ng/L</u>

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	1.42	J <u>J</u>	1.78	0.40
2706-90-3	Perfluoropentanoic acid (PFPeA)	1.44	J B <u>1.780</u>	1.78	0.40
307-24-4	Perfluorohexanoic acid (PFHxA)	1.31	J B <u>1.780</u>	1.78	0.40
375-85-9	Perfluoroheptanoic acid (PFHpA)	0.45	J B <u>1.780</u>	1.78	0.26
335-67-1	Perfluorooctanoic acid (PFOA)	0.66	J B <u>1.780</u>	1.78	0.42
375-95-1	Perfluorononanoic acid (PFNA)	0.42	J <u>J</u>	1.78	0.23
335-76-2	Perfluorodecanoic acid (PFDA)	0.40	J <u>J</u>	1.78	0.40
2058-94-8	Perfluoroundecanoic acid (PFUnA)	0.46	J <u>J</u>	1.78	0.40
307-55-1	Perfluorododecanoic acid (PFDoA)	1.78	U <u>J</u>	1.78	0.40
72629-94-8	Perfluorotridecanoic Acid (PFTriA)	1.78	U <u>J</u>	1.78	0.40
376-06-7	Perfluorotetradecanoic acid (PFTeA)	1.78	U <u>J</u>	1.78	0.40
375-73-5	Perfluorobutanesulfonic acid (PFBS)	1.78	U <u>J</u>	1.78	0.79
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	1.18	J B <u>1.780</u>	1.78	0.25
375-92-8	Perfluoroheptanesulfonic Acid (PFHpS)	1.78	U <u>J</u>	1.78	0.40
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	0.52	J <u>J</u>	1.78	0.27
335-77-3	Perfluorodecanesulfonic acid (PFDS)	1.78	U <u>J</u>	1.78	0.40
754-91-6	Perfluorooctane Sulfonamide (FOSA)	0.63	J B <u>1.780</u>	1.78	0.40
2355-31-9	N-methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	1.78	U <u>J</u>	1.78	0.54
2991-50-6	N-ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	1.78	U <u>J</u>	1.78	0.54
27619-97-2	6:2 FTS	1.61	J <u>J</u>	1.78	0.54
39108-34-4	8:2 FTS	0.96	J B <u>1.780</u>	1.78	0.54

AUG 31 2018

Initials: CE

LDC #: 42929D96
 SDG #: 200-43680-1
 Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET

Category B

Date: 2/27/18
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: LC/MS Fluorinated Alkyl Substances (EPA Method 537-Modified)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/ICV	W/A	RSD < 35%. True to D < 30%. ICV < 30%
IV.	Continuing calibration	W	CCV < 30%
V.	Laboratory Blanks	W	
VI.	Field blanks	N	
VII.	Surrogate spikes	N	
VIII.	Matrix spike/Matrix spike duplicates	A	
IX.	Laboratory control samples	A	LCS
X.	Field duplicates	N	
XI.	Labeled Compounds	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable
 N = Not provided/applicable
 SW = See worksheet

ND = No compounds detected
 R = Rinsate
 FB = Field blank

D = Duplicate
 TB = Trip blank
 EB = Equipment blank

SB=Source blank
 OTHER:

	Client ID	Lab ID	Matrix	Date
1	GARDEN_DEPT	200-43680-1	Water	06/01/18
2	GARDEN_DEPTMS	200-43680-1MS	Water	06/01/18
3	GARDEN_DEPTMSD	200-43680-1MSD	Water	06/01/18
4				
5				
6				
7				
8				

Notes:

Method: LC/MS PFOS/PFOAs (EPA Method 537M)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	☒	☐	☐	
Cooler temperature criteria was met.	☒	☐	☐	
II. LC/MS Instrument performance check				
Were the instrument performance reviewed and found to be within the specified criteria?	☒	☐	☐	
Were all samples analyzed within the 12 hour clock criteria?	☒	☐	☐	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	☒	☐	☐	
Were all percent relative standard deviations (%RSD) $\leq$ <u>25</u> 20%?	☒	☐	☐	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?	☒	☐	☐	
Were the S/N ratio for all compounds within validation criteria?	☒	☐	☐	
Were all analytes within 70-130% or percent differences (%D) $\leq$ 30% of their true value for each calibration standard?	☐	☒	☐	
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	☒	☐	☐	
Were all percent differences (%D) $\leq$ 30%	☒	☒	☐	
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	☒	☐	☐	
Were all percent differences (%D) $\leq$ 30%	☒	☒	☐	
Were the S/N ratio for all compounds within validation criteria?	☒	☐	☐	
Were all the retention times within the acceptance windows?	☒	☐	☐	
V. Laboratory Blanks				
Was a method blank associated with every sample in this SDG?	☒	☐	☐	
Was a method blank analyzed for each matrix and concentration?	☒	☐	☐	
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	☒	☐	☐	
VI. Field blanks				
Field blanks were identified in this SDG.	☐	☒	☐	
Target compounds were detected in the field blanks.	☐	☐	☒	
VII. Surrogate spikes				
Were all surrogate %R within the QC limits?	☐	☐	☒	
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	☐	☐	☒	
VIII. Matrix spike/Matrix spike duplicates				

Validation Area	Yes	No	NA	Findings/Comments
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
IV. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XI. Internal standards				
Were internal standard area counts within acceptance limits?	✓			
XII. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XIII. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			

TARGET COMPOUND WORKSHEET

METHOD: PFOS/PFOAs

A. Perfluorohexanoic acid (PFHxA)			
B. Perfluoroheptanoic acid (PFHpA)			
C. Perfluorooctanoic acid (PFOA)			
D. Perfluorononanoic acid (PFNA)			
E. Perfluorodecanoic acid (PFDA)			
F. Perfluoroundecanoic acid (PFUnA)			
G. Perfluorododecanoic acid (PFDoA)			
H. Perfluorotridecanoic acid (PFTriDA)			
I. Perfluorotetradecanoic acid (PFTeDA)			
J. Perfluorobutanesulfonic acid (PFBS)			
K. Perfluorohexanesulfonic acid (PFHxS)			
L. Perfluoroheptanesulfonic acid (PFHpS)			
M. Perfluorooctanesulfonic acid (PFOS)			
N. Perfluorodecanesulfonic acid (PFDS)			
O. Perfluorooctane Sulfonamide (FOSA)			
P. Perfluorobutanoic acid (PFBA)			
Q. Perfluoropentanoic acid (PFPeA)			
R. 6:2FTS			
S. 8:2 FTS			
T. N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)			
U. N-Ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)			

VALIDATION FINDINGS WORKSHEET

Initial Calibration

METHOD: LCMS PFCs

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Did the laboratory perform a 5 point calibration prior to sample analysis?

Did the initial calibration meet the curve fit acceptance criteria of > 0.990 ?

Were all percent relative standard deviations (%RSD) $< 20\%$? ~~3570~~ ?

Were all analytes within 70-130% or percent differences (%D) $\leq 30\%$ of their true value for each calibration standard?

[illegible]

VALIDATION FINDINGS WORKSHEET

Continuing Calibration

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A

Was a continuing calibration standard analyzed after every 10 injections for each instrument?

Y (N) N/A

Were all continuing calibration percent differences (%D) ≤ 30 %?

[illegible]

LDC #: 499096

VALIDATION FINDINGS WORKSHEET

BlanksPage: 1 of 1Reviewer: Q2nd Reviewer: Q**METHOD:** LC/MS PFOS/PFOAs (EPA Method 537M)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

- ☒ N N/A Were all samples associated with a given method blank?
- ☒ N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
- ☒ N N/A Was a method blank performed with each extraction batch?
- ☒ N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Blank extraction date: 6/1/18 Blank analysis date: 6/1/18Conc. units: ng/LAssociated samples: All Anal U

Compound	Blank ID	Sample Identification							
	<u>UB200-130355-1A</u>	<u>1</u>							
<u>A</u>	<u>1.102</u>	<u>1.44/1.78</u>							
<u>A</u>	<u>0.905</u>	<u>1.31/1.78</u>							
<u>B</u>	<u>0.372</u>	<u>0.45/1.78</u>							
<u>C</u>	<u>0.733</u>	<u>0.66/1.78</u>							
<u>K</u>	<u>1.399</u>	<u>1.18/1.78</u>							
<u>L</u>	<u>0.477</u>								
<u>O</u>	<u>0.679</u>	<u>0.63/1.78</u>							

Blank extraction date: _____ Blank analysis date: _____

Associated samples: _____

Conc. units: _____

Compound	Blank ID	Sample Identification							
<u>S</u>	<u>0.915</u>	<u>0.96/1.78</u>							
	<u>(LRL)</u>								

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:

All contaminants within five times the method blank concentration were qualified as not detected, "U".

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification**METHOD:** LC/MS PFOS/PFOAs (EPA Method 537M)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

 A_x = Area of compound, C_x = Concentration of compound, S = Standard deviation of the RRFs X = Mean of the RRFs A_{is} = Area of associated internal standard C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF (.50 std)	RRF (.50 std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	10A2	6/6/10	PFBS (1st internal standard)	0.8512	0.8512	0.8425	0.8425	10.9	10.9
			(2nd internal standard)						
			(3rd internal standard)						
2			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC#: 4-9-9 596VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation VerificationPage: 1 of 1
Reviewer: 9
2nd Reviewer: Q

Method: LC/MS PFCs (EPA Method 537)

Calibration Date	System	Compound	Standard	(Y) Response	(X) Concentration
6/6/2018	LC410	PFOA	s1	1.327955	1.000
			s2	1.905625	2.000
			s3	4.770875	5.000
			s4	22.005285	20.000
			s5	51.983356	50.000
			s6	236.696790	200.000

Regression Output

Reported

Constant	-1.841211	-0.194000
Std Err of Y Est		
R Squared	0.999100	0.997000
Degrees of Freedom		
X Coefficient(s)	1.186105	1.150600
Std Err of Coef.		
Correlation Coefficient	0.999550	
Coefficient of Determination (r^2)	0.999100	0.997000

LDC #: 4-9-9096

VALIDATION FINDINGS WORKSHEET **Continuing Calibration Results Verification**

Page: 1 of 1
 Reviewer: g
 2nd Reviewer: a

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Difference} = 100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$$

$$\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$$

Where: ave. RRF = initial calibration average RRF
 RRF = continuing calibration RRF
 A_x = Area of compound, A_{is} = Area of associated internal standard
 C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (Initial)	Reported	Recalculated	Reported	Recalculated
					RRF (CC)	RRF (CC)	%D	%D
1	~~PF061318A~~	~~6/4/18~~	~~PFBS~~ (1st internal standard)	~~0.8425~~	0.8323	0.8323	1.2	1.2
	IS		PF0A (2nd internal standard)	50.00	4.014	4.014	19.7	19.7
			(3rd internal standard)					
2	~~PF061318A~~	~~6/4/18~~	~~PFBS~~ (1st internal standard)	~~0.8425~~	0.9017	0.9017	7.0	7.0
			PF0A (2nd internal standard)	50.00	47.620	47.623	4.8	4.8
			(3rd internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results

VALIDATION FINDINGS WORKSHEET Matrix Spike/Matrix Spike Duplicates Results Verification

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where: SSC = Spiked sample concentration
SA = Spike added

SC = Sample concentration

$$\text{RPD} = |\text{MSC} - \text{MSC}| * 2 / (\text{MSC} + \text{MSDC})$$

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD samples: 2/3

Compound	Spike Added (<i>MS/L</i>)		Sample Concentration (<i>MS/L</i>)	Spiked Sample Concentration (<i>MS/L</i>)		Matrix Spike	Matrix Spike Duplicate	MS/MSD			
	MS	MSD	-----	MS	MSD	Percent Recovery		Percent Recovery		RPD	
						Reported	Recalc	Reported	Recalc	Reported	Recalculated
<i>PFOA</i>	<i>33.8</i>	<i>36.8</i>	<i>0.66</i>	<i>35.33</i>	<i>36.68</i>	<i>102</i>	<i>102</i>	<i>98</i>	<i>98</i>	<i>4</i>	<i>4</i>
<i>PFOS</i>	<i>31.4</i>	<i>34.2</i>	<i>0.52</i>	<i>34.56</i>	<i>34.92</i>	<i>108</i>	<i>108</i>	<i>101</i>	<i>101</i>	<i>1</i>	<i>1</i>

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification**METHOD:** LC/MS PFOS/PFOAs (EPA Method 537M)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Recovery} = 100 * (\text{SC}/\text{SA})$$

Where: SSC = Spike concentration
SA = Spike added

$$\text{RPD} = | \text{LCSC} - \text{LCSDC} | * 2 / (\text{LCSC} + \text{LCSDC})$$

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 200-B0355/2-A

Compound	Spike Added (<u>113/4</u>)		Spike Concentration (<u>113/4</u>)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
~~PFOA~~	40.0	NA	40.72	NA	102	102				
~~PFOS~~	37.1	↓	41.59	↓	112	112				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

Page: 1 of 1

Reviewer: 9

2nd reviewer: _____

METHOD: LC/MS PFOS/PFOAs (EPA Method 537M)

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 1, PFOA

$$\text{Conc.} = \frac{(1948 \times 50)}{(1.1506)(0.2802)} + 0.194 \quad (0.5)(1)$$

$$= 0.658 \text{ ug/L}$$

[illegible]

Site: Speonk Solvent Plume
Laboratory: TestAmerica, Inc., Edison, NJ
Report No.: 460-155047-1
Reviewer: Pei Geng and Christina Rink/Laboratory Data Consultants for
Environmental Assessment & Remediations, Patchogue, NY
Date: September 4, 2018

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SP-44P	460-155047-1	1,4-Dioxane
SP-48P	460-155047-2	1,4-Dioxane
SP-I	460-155047-3	1,4-Dioxane
SP-48PMS	460-155047-2MS	1,4-Dioxane
SP-48PMSD	460-155047-2MSD	1,4-Dioxane

Associated QC Samples(s):

Field/Trip Blanks: None Associated

Field Duplicate pair: SP-48P and SP-I

The above-listed water samples were collected on April 27, 2018 and were analyzed for 1,4-dioxane by SW 846 method 8270D in selected ion monitoring (SIM) mode and isotope dilution. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Semivolatile Data Validation*, SOP HW-35A, Revision 1 (September 2016) and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA 540-R-2017-002 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

All criteria were met.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

MS/MSD Results

MS/MSD analyses were performed on sample SP-48P for 1,4-dioxane analysis. All criteria were met.

LCS Results

All criteria were met.

Internal Standards

All criteria were met.

Field Duplicate Results

Samples SP-48P and SP-I were submitted as the field duplicate pair with this sample group. There were no detected results in the field duplicate pair for 1,4-dioxane.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the minimum detection limit (MDL) in the 1,4-dioxane analysis.

Dilutions were not required for 1,4-dioxane analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

- U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified “J” data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The ‘J’ data may be biased high or low or the direction of the bias may be indeterminable.
- UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified “UJ” data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The ‘UJ’ data may be biased low.
- JN - The analysis indicates the presence of a compound that has been “tentatively identified” (N) and the associated numerical value represents its approximate (J) concentration.
- R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-155047-1
SDG No.: _____
Client Sample ID: SP-44P Lab Sample ID: 460-155047-1
Matrix: Water Lab File ID: C28893.D
Analysis Method: 8270D SIM ID Date Collected: 04/27/2018 09:49
Extract. Method: 3510C Date Extracted: 05/02/2018 08:33
Sample wt/vol: 240 (mL) Date Analyzed: 05/02/2018 13:54
Con. Extract Vol.: 2 (mL) Dilution Factor: 1
Injection Volume: 5 (uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 515933 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.73		0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	42		10-150

AUG 31 2018

Initials: *CR*

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-155047-1
SDG No.: _____
Client Sample ID: SP-48P Lab Sample ID: 460-155047-2
Matrix: Water Lab File ID: C28890.D
Analysis Method: 8270D SIM ID Date Collected: 04/27/2018 11:37
Extract. Method: 3510C Date Extracted: 05/02/2018 08:33
Sample wt/vol: 240(mL) Date Analyzed: 05/02/2018 12:54
Con. Extract Vol.: 2(mL) Dilution Factor: 1
Injection Volume: 5(uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 515933 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U <u>U</u>	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	35		10-150

AUG 31 2018

Initials: CR

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-155047-1
SDG No.: _____
Client Sample ID: SP-I Lab Sample ID: 460-155047-3
Matrix: Water Lab File ID: C28894.D
Analysis Method: 8270D SIM ID Date Collected: 04/27/2018 00:00
Extract. Method: 3510C Date Extracted: 05/02/2018 08:33
Sample wt/vol: 240(mL) Date Analyzed: 05/02/2018 14:12
Con. Extract Vol.: 2(mL) Dilution Factor: 1
Injection Volume: 5(uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 515933 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U <u>U</u>	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	35		10-150

AUG 31 2018

Initials: CR

LDC #: 42929E2b
 SDG #: 460-155407-1
 Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET

Category B

Date: 8/27/18

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8270D-SIM) *isotope dilution*

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/LOV	A	RSD ≤ 20%
IV.	Continuing calibration	A	CCV ≤ 20%
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
~~VII.~~	~~Surrogate spikes~~		
VIII.	Matrix spike/Matrix spike duplicates	A	
IX.	Laboratory control samples	A	LES
X.	Field duplicates	ND	(2,3)
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable
 N = Not provided/applicable
 SW = See worksheet

ND = No compounds detected
 R = Rinsate
 FB = Field blank

D = Duplicate
 TB = Trip blank
 EB = Equipment blank

SB=Source blank
 OTHER:

	Client ID	Lab ID	Matrix	Date
1	SP-44P	460-155047-1	Water	04/27/18
2	SP-48P	460-155047-2	Water	04/27/18
3	SP-I	460-155047-3	Water	04/27/18
4	SP-48PMS	460-155047-2MS	Water	04/27/18
5	SP-48PMSD	460-155047-2MSD	Water	04/27/18
6				
7				
8				

Notes:

VALIDATION FINDINGS CHECKLIST

Method: PAH (EPA SW 846 Method 8270D-SIM)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	☒	☐	☐	
Was cooler temperature criteria met?	☒	☐	☐	
II. GC/MS Instrument performance check (Not required)				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	☒	☐	☐	
Were all samples analyzed within the 12 hour clock criteria?	☒	☐	☐	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	☒	☐	☐	
Were all percent relative standard deviations (%RSD) $\leq 20\%$ and relative response factors (RRF) ≥ 0.05 ?	☒	☐	☐	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?	☐	☐	☒	
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	☐	☐	☒	
Were all percent differences (%D) $\leq 30\%$ or percent recoveries (%R) 70-130%?	☐	☐	☒	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	☒	☐	☐	
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) ≥ 0.05 ?	☒	☐	☐	
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	☒	☐	☐	
Was a laboratory blank analyzed for each matrix and concentration?	☒	☐	☐	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.	☐	☐	☒	
VI. Field blanks				
Were field blanks identified in this SDG?	☐	☒	☐	
Were target compounds detected in the field blanks?	☐	☐	☒	
VII. Surrogate spikes				
Were all surrogate percent differences (%R) within QC limits?	☐	☐	☒	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?	☐	☐	☒	
If any percent recoveries (%R) was less than 10 percent, was a reanalysis performed to confirm %R?	☐	☐	☒	

LDC #: 10929226

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: [Signature]
2nd Reviewer: [Signature]

Validation Area	Yes	No	NA	Findings/Comments
VIII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	☒	☐	☐	
Was a MS/MSD analyzed every 20 samples of each matrix?	☒	☐	☐	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	☒	☐	☐	
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	☒	☐	☐	
Was an LCS analyzed per analytical batch?	☒	☐	☐	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	☒	☐	☐	
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	☐	☒	☐	
Were target compounds detected in the field duplicates?	☐	☐	☒	
XI. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	☒	☐	☐	
Were retention times within + 30 seconds of the associated calibration standard?	☒	☐	☐	
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	☒	☐	☐	
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	☒	☐	☐	
XIII. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	☒	☐	☐	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	☒	☐	☐	
Were chromatogram peaks verified and accounted for?	☒	☐	☐	
XIV. System performance				
System performance was found to be acceptable.	☒	☐	☐	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	☒	☐	☐	

VALIDATION FINDINGS WORKSHEET **Initial Calibration Calculation Verification**

METHOD: GC/MS SVOC (EPA SW 846 Method 8270D-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

A_x = Area of compound,

C_x = Concentration of compound,

S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard

C_{is} = Concentration of internal standard

X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF (2.0 std)	RRF (2.0 std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	ICAL	4/30/18	1,4-Dioxane (1,4-Dioxane-d8)	1.1519	1.1519	1.2423	1.2423	11.1	11.1
	(MS13)								
2									
3									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results VerificationPage: 1 of 1
Reviewer: PG
2nd Reviewer: Q**METHOD:** GC/MS SVOCs (EPA SW 846 Method 8270D-SIM)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = $100 * (\text{ave. RRF} - \text{RRF}) / \text{ave. RRF}$ $\text{RRF} = (A_x)(C_{is}) / (A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF

RRF = continuing calibration RRF

 A_x = Area of compound, C_x = Concentration of compound, A_{is} = Area of associated internal standard C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported	Recalculated	Reported	Recalculated
					RRF (CC)	RRF (CC)	%D	%D
1	C28887	5/2/18	1,4-Dioxane (1,4-Dioxane-d8)	1.2423	1.265	1.265	1.8	1.8
	(MS13)							
2								
3								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results VerificationPage: 1 of 1
Reviewer: 9
2nd Reviewer: [Signature]

METHOD: GC/MS PAHs (EPA SW846 Method 8270D-SIM)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Recovery} = 100 * (\text{SSC} - \text{SC}) / \text{SA}$$

Where: SSC = Spiked sample concentration
SA = Spike added

SC = Sample concentration

$$\text{RPD} = | \text{MSC} - \text{MSD} | * 2 / (\text{MSC} + \text{MSD})$$

MSC = Matrix spike concentration

MSDC = Matrix spike duplicate concentration

MS/MSD samples: 4/5

Compound	Spike Added (<u>MS</u>)		Sample Concentration (<u>MS</u>)	Spiked Sample Concentration (<u>MS</u>)		Matrix Spike		Matrix Spike Duplicate		MS/MSD	
						Percent Recovery		Percent Recovery		RPD	
	MS	MSD		MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
<u>1,4-Dioxane</u>	<u>1.67</u>	<u>1.67</u>	<u>NB</u>	<u>1.74</u>	<u>1.78</u>	<u>104</u>	<u>104</u>	<u>107</u>	<u>107</u>	<u>3</u>	<u>2</u>

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 1092226

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: [Signature]
2nd Reviewer: [Signature]

METHOD: GC/MS PAHs (EPA SW846 Method 8270D-SIM)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * (SC/SA)$

Where: SSC = Spike concentration
SA = Spike added

RPD = $|LCSC - LCSDC| * 2 / (LCSC + LCSDC)$

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: A60-515892

Compound	Spike Added (<u>µg/L</u>)		Spike Concentration (<u>µg/L</u>)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
<u>1,4-Dioxane</u>	<u>1.60</u>	<u>NA</u>	<u>1.76</u>	<u>NA</u>	<u>110</u>	<u>110</u>				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

METHOD: GC/MS PAHs (EPA SW846 Method 8270D-SIM)

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{ic})(RRF)(V_c)(V_i)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_f = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 1, 1,4-Dioxane

$$\text{Conc.} = \frac{(5097)(4.00)(2000)(1)}{(97485)(1.24)(240)} = 0.73 \text{ M}_L$$

[illegible]

Site: Speonk Solvent Plume
Laboratory: TestAmerica, Inc., Edison, NJ
Report No.: 460-155070-1
Reviewer: Pei Geng and Christina Rink/Laboratory Data Consultants for
Environmental Assessment & Remediations, Patchogue, NY
Date: August 29, 2018

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SP-81	460-155070-1	1,4-Dioxane
SP-22P	460-155070-2	1,4-Dioxane
SP-66D	460-155070-3	1,4-Dioxane

Associated QC Samples(s):

Field/Trip Blanks: None Associated

Field Duplicate pair: None Associated

The above-listed water samples were collected on April 26, 2018 and were analyzed for 1,4-dioxane by SW 846 method 8270D in selected ion monitoring (SIM) mode and isotope dilution. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Semivolatile Data Validation*, SOP HW-35A, Revision 1 (September 2016) and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA 540-R-2017-002 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

All criteria were met.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

MS/MSD Results

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

LCS Results

All criteria were met.

Internal Standards

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the minimum detection limit (MDL) in the 1,4-dioxane analysis.

Dilutions were not required for 1,4-dioxane analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

- U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified “J” data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The ‘J’ data may be biased high or low or the direction of the bias may be indeterminable.
- UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified “UJ” data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The ‘UJ’ data may be biased low.
- JN - The analysis indicates the presence of a compound that has been “tentatively identified” (N) and the associated numerical value represents its approximate (J) concentration.
- R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-155070-1
SDG No.: _____
Client Sample ID: SP-81 Lab Sample ID: 460-155070-1
Matrix: Water Lab File ID: C28895.D
Analysis Method: 8270D SIM ID Date Collected: 04/26/2018 09:35
Extract. Method: 3510C Date Extracted: 05/02/2018 08:33
Sample wt/vol: 240(mL) Date Analyzed: 05/02/2018 14:31
Con. Extract Vol.: 2(mL) Dilution Factor: 1
Injection Volume: 5(uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 515933 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	4.2		0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	42		10-150

AUG 31 2018

Initials: CE

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-155070-1
SDG No.: _____
Client Sample ID: SP-22P Lab Sample ID: 460-155070-2
Matrix: Water Lab File ID: C28896.D
Analysis Method: 8270D SIM ID Date Collected: 04/26/2018 11:07
Extract. Method: 3510C Date Extracted: 05/02/2018 08:33
Sample wt/vol: 240(mL) Date Analyzed: 05/02/2018 14:49
Con. Extract Vol.: 2(mL) Dilution Factor: 1
Injection Volume: 5(uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 515933 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U <u>0</u>	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	40		10-150

AUG 31 2018

Initials: CR

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-155070-1
 SDG No.: _____
 Client Sample ID: SP-66D Lab Sample ID: 460-155070-3
 Matrix: Water Lab File ID: C28897.D
 Analysis Method: 8270D SIM ID Date Collected: 04/26/2018 13:55
 Extract. Method: 3510C Date Extracted: 05/02/2018 08:33
 Sample wt/vol: 240(mL) Date Analyzed: 05/02/2018 15:08
 Con. Extract Vol.: 2(mL) Dilution Factor: 1
 Injection Volume: 5(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 515933 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U <u>U</u>	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	33		10-150

AUG 31 2018

Initials: CR

LDC #: 42929F2b
 SDG #: 460-155070-1
 Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET

Category B

Date: 8/7/18
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8270D-SIM) (isotope dilution)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/10X	A	RPD ≤ 20%
IV.	Continuing calibration	A	CCV ≤ 20%
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes		
VIII.	Matrix spike/Matrix spike duplicates	A	
IX.	Laboratory control samples	A	LCs
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable
 N = Not provided/applicable
 SW = See worksheet

ND = No compounds detected
 R = Rinsate
 FB = Field blank

D = Duplicate
 TB = Trip blank
 EB = Equipment blank

SB=Source blank
 OTHER:

	Client ID	Lab ID	Matrix	Date
1	SP-81	460-155070-1	Water	04/26/18
2	SP-22P	460-155070-2	Water	04/26/18
3	SP-66D	460-155070-3	Water	04/26/18
4				
5				
6				
7				
8				

Notes:

Method: PAH (EPA SW 846 Method 8270D-SIM)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	☒	☐	☐	
Was cooler temperature criteria met?	☒	☐	☐	
II. GC/MS Instrument performance check (Not required)				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	☒	☐	☐	
Were all samples analyzed within the 12 hour clock criteria?	☒	☐	☐	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	☒	☐	☐	
Were all percent relative standard deviations (%RSD) $\leq$ 20% and relative response factors (RRF) $\geq$ 0.05?	☒	☐	☐	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?	☐	☐	☒	
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	☐	☐	☒	
Were all percent differences (%D) $\leq$ 30% or percent recoveries (%R) 70-130%?	☐	☐	☒	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	☒	☐	☐	
Were all percent differences (%D) $\leq$ 20% and relative response factors (RRF) $\geq$ 0.05?	☒	☐	☐	
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	☒	☐	☐	
Was a laboratory blank analyzed for each matrix and concentration?	☒	☐	☐	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.	☐	☒	☐	
VI. Field blanks				
Were field blanks identified in this SDG?	☐	☒	☐	
Were target compounds detected in the field blanks?	☐	☐	☒	
VII. Surrogate spikes				
Were all surrogate percent differences (%R) within QC limits?	☐	☐	☒	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?	☐	☐	☒	
If any percent recoveries (%R) was less than 10 percent, was a reanalysis performed to confirm %R?	☐	☐	☒	

LDC #: 4299F-24

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: Q
2nd Reviewer: ✓

Validation Area	Yes	No	NA	Findings/Comments
VIII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	☒	☐	☐	
Was a MS/MSD analyzed every 20 samples of each matrix?	☒	☐	☐	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	☒	☐	☐	
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	☒	☐	☐	
Was an LCS analyzed per analytical batch?	☒	☐	☐	
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	☒	☐	☐	
X. Field duplicates				
Were field duplicate pairs identified in this SDG?	☐	☒	☐	
Were target compounds detected in the field duplicates?	☐	☐	☒	
XI. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	☒	☐	☐	
Were retention times within + 30 seconds of the associated calibration standard?	☒	☐	☐	
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	☒	☐	☐	
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	☒	☐	☐	
XIII. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	☒	☐	☐	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	☒	☐	☐	
Were chromatogram peaks verified and accounted for?	☒	☐	☐	
XIV. System performance				
System performance was found to be acceptable.	☒	☐	☐	
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	☒	☐	☐	

VALIDATION FINDINGS WORKSHEET **Initial Calibration Calculation Verification**

METHOD: GC/MS SVOC (EPA SW 846 Method 8270D-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

A_x = Area of compound,

C_x = Concentration of compound,

S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard

C_{is} = Concentration of internal standard

X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF (2.0 std)	RRF (2.0 std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	ICAL	4/30/18	1,4-Dioxane (1,4-Dioxane-d8)	1.1519	1.1519	1.2423	1.2423	11.1	11.1
	(MS13)								
2									
3									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Page: 1 of 1
Reviewer: PG
2nd Reviewer: [Signature]

METHOD: GC/MS SVOCs (EPA SW 846 Method 8270D-SIM)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

C_x = Concentration of compound, C_{is} = Concentration of internal standard

[illegible]

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

METHOD: GC/MS PAHs (EPA SW846 Method 8270D-SIM)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

$$\% \text{ Recovery} = 100 * (\text{SC}/\text{SA})$$

Where: SSC = Spike concentration
SA = Spike added

$$RPD = |LCSC - LCSDC| * 2 / (LCSC + LCSDC)$$

LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 440-515892

[illegible]

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

METHOD: GC/MS PAHs (EPA SW846 Method 8270D-SIM)

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 1, 1,4-Dioxan

$$\text{Conc.} = \frac{(136454 \times 4.00) \times 2000 \times 1}{(82067 \times 1.242) \times 240} = 4.15 \text{ } \mu\text{g/L}$$

[illegible]

Site: Speonk Solvent Plume
Laboratory: TestAmerica, Inc., Edison, NJ
Report No.: 460-155112-1
Reviewer: Pei Geng and Christina Rink/Laboratory Data Consultants for
Environmental Assessment & Remediations, Patchogue, NY
Date: August 29, 2018

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
SP-50M	460-155112-1	1,4-Dioxane
SP-5A	460-155112-2	1,4-Dioxane
SP-A	460-155112-3	1,4-Dioxane

Associated QC Samples(s):

Field/Trip Blanks: None Associated

Field Duplicate pair: None Associated

The above-listed water samples were collected on April 30, 2018 and were analyzed for 1,4-dioxane by SW 846 method 8270D in selected ion monitoring (SIM) mode and isotope dilution. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Semivolatile Data Validation*, SOP HW-35A, Revision 1 (September 2016) and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA 540-R-2017-002 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

All criteria were met.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

MS/MSD Results

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

LCS Results

All criteria were met.

Internal Standards

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the minimum detection limit (MDL) in the 1,4-dioxane analysis.

Dilutions were not required for 1,4-dioxane analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

- U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified “J” data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The ‘J’ data may be biased high or low or the direction of the bias may be indeterminable.
- UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified “UJ” data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The ‘UJ’ data may be biased low.
- JN - The analysis indicates the presence of a compound that has been “tentatively identified” (N) and the associated numerical value represents its approximate (J) concentration.
- R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-155112-1
SDG No.: _____
Client Sample ID: SP-50M Lab Sample ID: 460-155112-1
Matrix: Water Lab File ID: C28898.D
Analysis Method: 8270D SIM ID Date Collected: 04/30/2018 10:40
Extract. Method: 3510C Date Extracted: 05/02/2018 08:33
Sample wt/vol: 240(mL) Date Analyzed: 05/02/2018 15:26
Con. Extract Vol.: 2(mL) Dilution Factor: 1
Injection Volume: 5(uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 515933 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.32		0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	34		10-150

AUG 31 2018

Initials: *CE*

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-155112-1
SDG No.: _____
Client Sample ID: SP-5A Lab Sample ID: 460-155112-2
Matrix: Water Lab File ID: C28899.D
Analysis Method: 8270D SIM ID Date Collected: 04/30/2018 12:58
Extract. Method: 3510C Date Extracted: 05/02/2018 08:33
Sample wt/vol: 240(mL) Date Analyzed: 05/02/2018 15:44
Con. Extract Vol.: 2(mL) Dilution Factor: 1
Injection Volume: 5(uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 515933 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U <u>0</u>	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	34		10-150

AUG 31 2018

Initials: CR

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-155112-1
SDG No.: _____
Client Sample ID: SP-A Lab Sample ID: 460-155112-3
Matrix: Water Lab File ID: C28900.D
Analysis Method: 8270D SIM ID Date Collected: 04/30/2018 00:00
Extract. Method: 3510C Date Extracted: 05/02/2018 08:33
Sample wt/vol: 240(mL) Date Analyzed: 05/02/2018 16:02
Con. Extract Vol.: 2(mL) Dilution Factor: 1
Injection Volume: 5(uL) Level: (low/med) Low
% Moisture: _____ GPC Cleanup: (Y/N) N
Analysis Batch No.: 515933 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.21	U <u>U</u>	0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	33		10-150

AUG 31 2018

Initials: CR

LDC #: 42929G2b
 SDG #: 460-155112-1
 Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET

Category B

Date: 2/27/18

Page: 1 of 1

Reviewer: [Signature]

2nd Reviewer: [Signature]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8270D-SIM) (Isotope dilution)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/LOV	A X	RSO ≤ 20%
IV.	Continuing calibration	A	ECV ≤ 20%
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes		
VIII.	Matrix spike/Matrix spike duplicates	AA	CS
IX.	Laboratory control samples	A	LC5
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable
 N = Not provided/applicable
 SW = See worksheet

ND = No compounds detected
 R = Rinsate
 FB = Field blank

D = Duplicate
 TB = Trip blank
 EB = Equipment blank

SB=Source blank
 OTHER:

	Client ID	Lab ID	Matrix	Date
1	SP-50M	460-155112-1	Water	04/30/18
2	SP-5A	460-155112-2	Water	04/30/18
3	SP-A	460-155112-3	Water	04/30/18
4				
5				
6				
7				
8				

Notes:

LDC #: 42929426

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: Q
2nd Reviewer: Q

Method: PAH (EPA SW 846 Method 8270D-SIM)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	☒	☐	☐	
Was cooler temperature criteria met?	☒	☐	☐	
II. GC/MS Instrument performance check (Not required)				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	☒	☐	☐	
Were all samples analyzed within the 12 hour clock criteria?	☒	☐	☐	
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	☒	☐	☐	
Were all percent relative standard deviations (%RSD) $\leq 20\%$ and relative response factors (RRF) ≥ 0.05 ?	☒	☐	☐	
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?	☐	☐	☒	
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?	☐	☐	☒	
Were all percent differences (%D) $\leq 30\%$ or percent recoveries (%R) 70-130%?	☐	☐	☒	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	☒	☐	☐	
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) ≥ 0.05 ?	☒	☐	☐	
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	☒	☐	☐	
Was a laboratory blank analyzed for each matrix and concentration?	☒	☐	☐	
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.	☐	☒	☐	
VI. Field blanks				
Were field blanks identified in this SDG?	☐	☒	☐	
Were target compounds detected in the field blanks?	☐	☐	☒	
VII. Surrogate spikes				
Were all surrogate percent differences (%R) within QC limits?	☐	☐	☒	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?	☐	☐	☒	
If any percent recoveries (%R) was less than 10 percent, was a reanalysis performed to confirm %R?	☐	☐	☒	

VALIDATION FINDINGS CHECKLIST

Validation Area	Yes	No	NA	Findings/Comments
VIII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		/		
Was a MS/MSD analyzed every 20 samples of each matrix?			/	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			/	
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	/			
Was an LCS analyzed per analytical batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		/		
Were target compounds detected in the field duplicates?		/		
XI. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	/			
Were retention times within + 30 seconds of the associated calibration standard?	/			
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	/			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XIII. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	/			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	/			
Were chromatogram peaks verified and accounted for?	/			
XIV. System performance				
System performance was found to be acceptable.	/			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			

VALIDATION FINDINGS WORKSHEET **Initial Calibration Calculation Verification**

METHOD: GC/MS SVOC (EPA SW 846 Method 8270D-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

A_x = Area of compound,

C_x = Concentration of compound,

S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard

C_{is} = Concentration of internal standard

X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF (2.0 std)	RRF (2.0 std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	ICAL	4/30/18	1,4-Dioxane (1,4-Dioxane-d8)	1.1519	1.1519	1.2423	1.2423	11.1	11.1
	(MS13)								
2									
3									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

METHOD: GC/MS PAHs (EPA SW846 Method 8270D-SIM)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * (SC/SA)$ Where: SSC = Spike concentration
SA = Spike addedRPD = $|LCS - LCSD| * 2 / (LCS + LCSD)$

LCS = Laboratory control sample concentration LCSD = Laboratory control sample duplicate concentration

LCS/LCSD samples: 460-51589

Compound	Spike Added (<u>1.60</u>)		Spike Concentration (<u>1.76</u>)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
<u>1,4-Dioxane</u>	<u>1.60</u>	<u>NA</u>	<u>1.76</u>	<u>NA</u>	<u>110</u>	<u>110</u>				

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #:

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

Page: 6 of 1

Reviewer: Q

2nd reviewer: _____

METHOD: GC/MS PAHs (EPA SW846 Method 8270D-SIM)

1Y)N N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_s)(I_s)(V_t)(DF)(2.0)}{(A_s)(RRF)(V_o)(V_i)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_1 = Volume of extract injected in microliters (ul)

V_i = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D.

$$\text{Conc.} = \frac{(871)(4.00)(220)(1)}{(7357)(1.24)(240)} = 0.3214 \text{ L}$$

[illegible]

Site: Speonk Solvent Plume
Laboratory: TestAmerica, Inc., Edison, NJ
Report No.: 460-155882-1
Reviewer: Pei Geng and Christina Rink/Laboratory Data Consultants for
Environmental Assessment & Remediations, Patchogue, NY
Date: August 29, 2018

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
The Garden Dept Sprinkler	460-155882-1	1,4-Dioxane

Associated QC Samples(s):

Field/Trip Blanks: None Associated

Field Duplicate pair: None Associated

The above-listed water sample was collected on May 9, 2018 and was analyzed for 1,4-dioxane by SW 846 method 8270D in selected ion monitoring (SIM) mode and isotope dilution. The data validation was performed in accordance with the USEPA Region 2 *Standard Operating Procedure for Semivolatile Data Validation*, SOP HW-35A, Revision 1 (September 2016) and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, EPA 540-R-2017-002 (January 2017), modified as necessary to accommodate the non-CLP methodologies used.

The organic data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Gas Chromatography/Mass Spectrometry (GC/MS) Tunes
- Initial and Continuing Calibrations
- Blanks
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Control Sample (LCS) Results
- Internal Standards
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Overall Evaluation of Data and Potential Usability Issues

All results are usable as reported.

The validation findings were based on the following information.

Data Completeness

The data package was complete as defined under the requirements for the NYSDEC ASP category B laboratory deliverables.

Holding Times and Sample Preservation

All criteria were met.

GC/MS Tunes

All criteria were met.

Initial and Continuing Calibrations

All criteria were met.

Blanks

Contamination was not detected in the method blanks.

A field blank was not associated with this sample set. Validation action was not required on this basis.

MS/MSD Results

MS/MSD analyses were not associated with this sample set. Validation action was not required on this basis.

LCS Results

All criteria were met.

Internal Standards

All criteria were met.

Field Duplicate Results

A field duplicate pair was not associated with this sample set. Validation action was not required on this basis.

Quantitation Limits and Data Assessment

No results were reported below the reporting limit (RL) and above the minimum detection limit (MDL) in the 1,4-dioxane analysis.

Dilutions were not required for 1,4-dioxane analysis.

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted.

DATA VALIDATION QUALIFIERS

- U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.
- J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified “J” data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The ‘J’ data may be biased high or low or the direction of the bias may be indeterminable.
- UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified “UJ” data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The ‘UJ’ data may be biased low.
- JN - The analysis indicates the presence of a compound that has been “tentatively identified” (N) and the associated numerical value represents its approximate (J) concentration.
- R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Edison Job No.: 460-155882-1
 SDG No.: _____
 Client Sample ID: The Garden Dept Sprinkler Lab Sample ID: 460-155882-1
 Matrix: Water Lab File ID: C29070.D
 Analysis Method: 8270D SIM ID Date Collected: 05/09/2018 09:07
 Extract. Method: 3510C Date Extracted: 05/15/2018 08:41
 Sample wt/vol: 240(mL) Date Analyzed: 05/16/2018 10:51
 Con. Extract Vol.: 2(mL) Dilution Factor: 1
 Injection Volume: 5(uL) Level: (low/med) Low
 % Moisture: _____ GPC Cleanup: (Y/N) N
 Analysis Batch No.: 519570 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.65		0.21	0.017

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	45		10-150

AUG 31 2018

Initials: CR

LDC #: 42929H2b
 SDG #: 460-155882-1
 Laboratory: Test America, Inc.

VALIDATION COMPLETENESS WORKSHEET

Category B

Date: 8/27/18
 Page: 1 of 1
 Reviewer: [Signature]
 2nd Reviewer: [Signature]

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8270D-SIM) (isotope dilution)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Sample receipt/Technical holding times	A	
II.	GC/MS Instrument performance check	A	
III.	Initial calibration/IX	A/N	RSO = 20/0
IV.	Continuing calibration	A	CCV = 20/0
V.	Laboratory Blanks	A	
VI.	Field blanks	N	
VII.	Surrogate spikes		
VIII.	Matrix spike/Matrix spike duplicates	N	CS
IX.	Laboratory control samples	A	LC5/D
X.	Field duplicates	N	
XI.	Internal standards	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Target compound identification	A	
XIV.	System performance	A	
XV.	Overall assessment of data	A	

Note: A = Acceptable
 N = Not provided/applicable
 SW = See worksheet

ND = No compounds detected
 R = Rinsate
 FB = Field blank

D = Duplicate
 TB = Trip blank
 EB = Equipment blank

SB=Source blank
 OTHER:

	Client ID	Lab ID	Matrix	Date
1	The Garden Dept Sprinkler	460-155882-1	Water	05/09/18
2				
3				
4				
5				
6				
7				
8				

Notes:

LDC #: 42929 H26

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [Signature]
2nd Reviewer: [Signature]

Method: PAH (EPA SW 846 Method 8270D-SIM)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
Were all technical holding times met?	/			
Was cooler temperature criteria met?	/			
II. GC/MS Instrument performance check (Not required)				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	/			
Were all samples analyzed within the 12 hour clock criteria?	/			
IIIa. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Were all percent relative standard deviations (%RSD) $\leq 20\%$ and relative response factors (RRF) > 0.05 ?	/			
Was a curve fit used for evaluation? If yes, did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990 ?			/	
IIIb. Initial Calibration Verification				
Was an initial calibration verification standard analyzed after each initial calibration for each instrument?		/		
Were all percent differences (%D) $\leq 30\%$ or percent recoveries (%R) 70-130%?			/	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	/			
Were all percent differences (%D) $\leq 20\%$ and relative response factors (RRF) > 0.05 ?	/			
V. Laboratory Blanks				
Was a laboratory blank associated with every sample in this SDG?	/			
Was a laboratory blank analyzed for each matrix and concentration?	/			
Was there contamination in the laboratory blanks? If yes, please see the Blanks validation completeness worksheet.		/		
VI. Field blanks				
Were field blanks identified in this SDG?		/		
Were target compounds detected in the field blanks?			/	
VII. Surrogate spikes				
Were all surrogate percent differences (%R) within QC limits?			/	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			/	
If any percent recoveries (%R) was less than 10 percent, was a reanalysis performed to confirm %R?			/	

LDC #: 42894-7

VALIDATION FINDINGS CHECKLIST

Page: 2 of 2
Reviewer: Q
2nd Reviewer: Q

Validation Area	Yes	No	NA	Findings/Comments
VIII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.		☒		
Was a MS/MSD analyzed every 20 samples of each matrix?			☒	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			☒	
IX. Laboratory control samples				
Was an LCS analyzed for this SDG?	☒			
Was an LCS analyzed per analytical batch?	☒			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	☒			
X. Field duplicates				
Were field duplicate pairs identified in this SDG?		☒		
Were target compounds detected in the field duplicates?			☒	
XI. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	☒			
Were retention times within + 30 seconds of the associated calibration standard?	☒			
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	☒			
Were compound quantitation and RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	☒			
XIII. Target compound identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	☒			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	☒			
Were chromatogram peaks verified and accounted for?	☒			
XIV. System performance				
System performance was found to be acceptable.	☒			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	☒			

VALIDATION FINDINGS WORKSHEET

Initial Calibration Calculation Verification

METHOD: GC/MS SVOC (EPA SW 846 Method 8270D-SIM)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$$RRF = (A_x)(C_{is}) / (A_{is})(C_x)$$

average RRF = sum of the RRFs/number of standards

$$\%RSD = 100 * (S/X)$$

 A_x = Area of compound,

 C_x = Concentration of compound,

 S = Standard deviation of the RRFs,

 A_{is} = Area of associated internal standard

 C_{is} = Concentration of internal standard

 X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported	Recalculated	Reported	Recalculated	Reported	Recalculated
				RRF (2.0 std)	RRF (2.0 std)	Average RRF (initial)	Average RRF (initial)	%RSD	%RSD
1	ICAL	5/11/18	1,4-Dioxane (1,4-Dioxane-d8)	1.1835	1.135	1.2947	1.2947	12.5	12.5
	(MS13)								
2									
3									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 460-519238

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: 9
2nd Reviewer: 2

METHOD: GC/MS PAHs (EPA SW846 Method 8270D-SIM)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = $100 * (SC/SA)$

Where: SSC = Spike concentration
SA = Spike added

RPD = $|LCS - LCSD| * 2 / (LCS + LCSD)$

LCS = Laboratory control sample concentration LCSD = Laboratory control sample duplicate concentration

LCS/LCSD samples: 460-519238

Compound	Spike Added (<u>1.60</u>)		Spike Concentration (<u>1.73</u>)		LCS		LCSD		LCS/LCSD	
					Percent Recovery		Percent Recovery		RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
<u>1,4-Dioxane</u>	<u>1.60</u>	<u>1.60</u>	<u>1.73</u>	<u>1.81</u>	<u>108</u>	<u>108</u>	<u>113</u>	<u>113</u>	<u>5</u>	<u>5</u>

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 229126

VALIDATION FINDINGS WORKSHEET

Sample Calculation Verification

Page: of 1

Reviewer: Q

2nd reviewer: _____

METHOD: GC/MS PAHs (EPA SW846 Method 8270D-SIM)

Y	N	N/A
Y	N	N/A

Were all reported results recalculated and verified for all level IV samples?

Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_s)(RRF)(V_o)(V_i)(\%S)}$$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_f = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. 1, 1,4-Dioxane

$$\text{Conc.} = \frac{(2937)(4.00)(2000)(1)}{(10440)(1.247)(240)} = 0.646 \text{ } \mu\text{g/L}$$

[illegible]

LDC #: 42929

EDD POPULATION COMPLETENESS WORKSHEET

Date: 9/4/18
Page: 1 of 1
2nd Reviewer: JEThe LDC job number listed above was entered by CEJ
Entered from Body or Summary

	EDD Process		Comments/Action
I.	EDD Completeness	-	
Ia.	- All methods present?	y	
Ib.	- All samples present/match report?	y	
Ic.	- All reported analytes present?	y	
Id.	- 10% or 100% verification of EDD?	y	
II.	EDD Preparation/Entry	-	
IIa.	- Carryover U/J?	y	
IIb.	- Reason Codes used? If so, note which codes.	N	
IIc.	- Additional Information (QC Level, Validator, Validated Y/N, etc.)	y	
III.	Reasonableness Checks	-	
IIIa.	- Do all qualified ND results have ND qualifier (e.g. UJ)?	y	
IIIb.	- Do all qualified detect results have detect qualifier (e.g. J)?	y	
IIIc.	- If reason codes are used, do all qualified results have reason code field populated, and vice versa?	-	
IIId.	- Does the detect flag require changing for blank qualifier? If so, are all U results marked ND?	N/A	
IIIe.	- Do blank concentrations in report match EDD where data was qualified due to blank contamination?	y	
IIIf.	- Were multiple results reported due to dilutions/reanalysis? If so, were results qualified appropriately?	N/A	
IIIg.	- Are there any discrepancies between the data packet and the EDD?	y	

Notes: *see discrepancy sheet

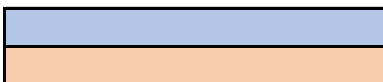
**APPENDIX B – GROUNDWATER SAMPLING LABORATORY ANALYTICAL RESULTS – FIELD BLANK
AND TRIP BLANKS**

Speonk Solvent Plume
 North Phillips Ave.
 Speonk, NY
 Site # 152185



Groundwater Sampling Laboratory Analytical Results - Field Blanks
 April 26, 2018
 TestAmerica Laboratories, Inc., EPA Method 8260C
 VOCs (ug/L)

Location	Depth	1,1 Dichloroethene	1,1,1 Trichloroethane	Carbon Tetrachloride	Chloroform	Diethyl ether	Methylene Chloride	Tetrachloroethene	Trichloroethylene
SP-22P	75-80	<1	<1	<1	1.2	<1	<1	26	6.2
SP-66D	95-100	<1	<1	<1	1.1	<1	<1	8.2	0.44 J
SP-81	70	2.4	2.5	4.1	34	0.15 J	<1	62	1.9
SSP_FIELDBLANK1_20180426		<1	<1	<1	<1	<1	5.4	<1	<1
SSP_FIELDBLANK2_20180426		<1	<1	<1	<1	<1	5.5	<1	<1
NYSDEC TOGS111 ClassGA Standard/Guidance		5	5	5	7	n/a	5	5	5



Indicates field blank and/or trip blank sample

Indicates detection in field blank and/or trip blank sample

"J" value indicates estimated values

The chemicals listed below were reported below the LRL:

1,1 Dichloroethane	Benzene
1,1,1,2 Tetrachloroethane	Chlorobenzene
1,1,2 Trichloroethane	Freon 113
1,1,2,2 Tetrachloroethane	MTBE
1,2 Dichlorobenzene	Tert-Amyl-Methyl-Ether
1,2 Dichloroethane	Total BTEX
1,3 Dichlorobenzene	Xylenes Total
1,4 Dichlorobenzene	

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185



Groundwater Sampling Laboratory Analytical Results - Equipment Blank
April 26, 2018
TestAmerica Laboratories, Inc., EPA Method 537
PFAS (ng/L)

Location	Depth	PFOS	PFOA	Combined PFOA & PFOS	N-MeFOSAA	N-EtFOSAA	PFBS	PFBA	PFDS	PFDA	PFDoA	PFHpS	PFHpA	PFHxS	PFHxA	PFNA	FOSA	PFPeA	PFTA/PFTeDA	PFTrIA/PFTrDA	PFUA/PFUDa	8:2 FTS	6:2 FTS
SP-22P	75-80	2.07	17.2	19.27	1.78 U	1.78 U	1.02 J	1.28 J	1.78 U	1.78 U	1.78 U	1.78 U	1.21 J	0.99 U	1.99 B	1.78 U	1.78 U	2.32 B	1.78 U	1.78 U	1.78 U	1.78 UJ	1.78 UJ
SP-66D	95-100	1.81 U	1.81 U	<3.6	1.81 U	1.81 U	1.81 U	0.83 J	1.81 U	1.81 U	1.81 U	1.81 U	1.81 U	1.08 U	1.81 U	1.81 U	1.81 U	1.15 U	1.81 U	1.81 U	1.81 U	1.17 J	1.81 UJ
SP-81	70	1.77 U	1.77 U	<3.54	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 U	0.49 U	1.77 U	1.77 U	1.77 U	1.77 U	1.77 UJ
SSP_EQUIPMENTBLANK 1_20180426		1.75 U	1.75 U	<3.5	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	1.75 U	<1.75 UJ	<1.75 UJ
SSP_EQUIPMENTBLANK 2_20180426		1.70 U	1.70 U	<3.4	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	1.70 U	<1.7 UJ	<1.7 UJ
USEPA Health Advisory Level		n/a	n/a	70	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

	Indicates equipment blank
	Indicates detection in equipment blank

"J" - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified 'J' data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

"B" - The analyte was found in an associated blank, as well as in the sample.

"U" - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is useable as a nondetect.

"UJ" - Analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The "UJ" data may be biased low.

N-MeFOSAA - N-methyl perfluorooctanesulfonamidoacetic acid
N-EtFOSAA - N-ethyl perfluorooctanesulfonamidoacetic acid
PFBS - Perfluorobutanesulfonic Acid
PFBA - Perfluorobutyric Acid
PFDS - Perfluorodecanesulfonic acid
PFDA - Perfluorodecanoic Acid
PFDoA - Perfluorododecanoic Acid

PFHpS - Perfluoroheptane Sulfonate
PFHpA - Perfluoroheptanoic Acid
PFHxS - Perfluorohexanesulfonic Acid
PFHxA - Perfluorohexanoic Acid
PFNA - Perfluorononanoic Acid
FOSA - Perfluorooctane Sulfonamide
PFOS - Perfluorooctanesulfonic Acid

PFOA - Perfluorooctanoic Acid
PFPeA - Perfluoropentanoic Acid
PFTA/PFTeDA - Perfluorotetradecanoic Acid
PFTrIA/PFTrDA - Perfluorotridecanoic Acid
PFUA/PFUDa - Perfluoroundecanoic Acid
8:2 FTS - SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE
6:2 FTS - SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185



Groundwater Sampling Laboratory Analytical Results - Equipment Blanks
April 27, 2018
TestAmerica Laboratories, Inc., EPA Method 537
PFAS (ng/L)

Location	Depth	PFOS	PFOA	Combined PFOA & PFOS	N-MeFOSAA	N-EtFOSAA	PFBS	PFBA	PFDS	PFDA	PFDoA	PFHpS	PFHpA	PFHxS	PFHxA	PFNA	FOSA	PFPeA	PFTA/PFTeDA	PFTriA/PFTrDA	PFUA/PFUDa	8:2 FTS	6:2 FTS
SP-44P	65-70	6.02	4.88	10.9	1.80 U	0.57 J	0.91 J	1.80 U	1.80 U	1.80 U	1.80 U	0.54 J	1.48 J	2.95 B	3.28 B	0.39 J	1.80 U	2.84 B	1.80 U	1.80 U	1.80 U	1.80 U	0.55 J
SP-48P	74.12-75.12	2.86	3.23	6.09	1.79 U	1.79 U	1.19 J	1.22 U	1.79 U	1.79 U	1.79 U	1.79 U	1.56 J	1.73 U	2.23 B	0.57 J	1.79 U	1.62 U	1.79 U	1.79 U	1.79 U	1.79 UJ	1.79 UJ
SSP_EQUIPMENTBLANK 1_20180427		1.62 U	1.62 U	<3.24	1.62 U	1.62 U	1.62 U	1.62 U	1.62 U	1.62 U	1.62 U	1.62 U	1.62 U	0.47 U	0.58 BJ	1.62 U	1.62 U	0.64 U	1.62 U	0.42 J	1.62 U	<1.62 UJ	<1.62 UJ
SSP_EQUIPMENTBLANK 2_20180427		0.28 J	1.63 U	0.28	1.63 U	1.63 U	1.63 U	0.68 J	1.63 U	0.45 BJ	1.63 U	1.63 U	1.63 U	0.59 BJ	0.51 BJ	1.63 U	0.41 J	0.37 BJ	1.63 U	1.63 U	1.63 U	1.63 U	1.63 U
USEPA Health Advisory Level		n/a	n/a	70	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

	Indicates equipment blank sample
	Indicates detection in equipment blank sample

"J" - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified 'J' data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

"B" - The analyte was found in an associated blank, as well as in the sample.

"U" - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is useable as a nondetect.

"UJ" - Analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The "UJ" data may be biased low.

Notes		
N-MeFOSAA - N-methyl perfluorooctanesulfonamidoacetic acid	PFHpS - Perfluoroheptane Sulfonate	PFOA - Perfluorooctanoic Acid
N-EtFOSAA - N-ethyl perfluorooctanesulfonamidoacetic acid	PFHpA - Perfluoroheptanoic Acid	PFPeA - Perfluoropentanoic Acid
PFBS - Perfluorobutanesulfonic Acid	PFHxS - Perfluorohexanesulfonic Acid	PFTA/PFTeDA - Perfluorotetradecanoic Acid
PFBA - Perfluorobutyric Acid	PFHxA - Perfluorohexanoic Acid	PFTriA/PFTrDA - Perfluorotridecanoic Acid
PFDS - Perfluorodecanesulfonic acid	PFNA - Perfluorononanoic Acid	PFUA/PFUDa - Perfluoroundecanoic Acid
PFDA - Perfluorodecanoic Acid	FOSA - Perfluorooctane Sulfonamide	8:2 FTS - SODIUM 1H,1H,2H,2H-PERFLUORODECANE SULFONATE
PFDoA - Perfluorododecanoic Acid	PFOS - Perfluorooctanesulfonic Acid	6:2 FTS - SODIUM 1H,1H,2H,2H-PERFLUOROOCTANE SULFONATE

Speonk Solvent Plume
 North Phillips Ave.
 Speonk, NY
 Site # 152185



Groundwater Sampling Laboratory Analytical Results - Field Blank and Trip Blanks
 April 30, 2018
 TestAmerica Laboratories, Inc., EPA Method 8260C
 VOCs (ug/L)

Location	Depth	1,1,1,2 Tetrachloroethane	1,1,1,2,2 Tetrachloroethane	1,2 Dichloroethane	Chloroform	Methylene Chloride	t butylmethylether	Tetrachloroethene	Trichloroethylene
SP-5A	120	<1	<1	0.27 J	1.2	<1	<1	16	1.5
SP-5M	26-27	<1	<1	<1	<1	<1	0.85 J	<1	<1
SP-50M	85	0.66 J	0.47 J	0.27 J	2.1	<1	<1	280	5.2
SSP_FieldBlank1_20180430		<1	<1	<1	<1	7	<1	<1	<1
SSP_FieldBlank2_20180430		<1	<1	<1	<1	6.9	<1	<1	<1
SSP_TripBlank1_20180430		<1	<1	<1	<1	<1	<1	<1	<1
SSP_TripBlank2_20180430		<1	<1	<1	<1	0.33 J	<1	<1	<1
NYSDEC TOGS111 ClassGA Standard/Guidance		5	5	0.6	7	5	n/a	5	5



Indicates field blank and/or trip blank sample



Indicates detection in field blank and/or trip blank sample

"J" value indicates estimated values

The chemicals listed below were reported below the LRL:

1,1 Dichloroethane	1,2 Dichlorobenzene
1,1 Dichloroethene	1,3 Dichlorobenzene
1,1,1 Trichloroethane	1,4 Dichlorobenzene
1,1,2 Trichloroethane	Benzene

Speonk Solvent Plume
North Phillips Ave.
Speonk, NY
Site # 152185



Groundwater Sampling Laboratory Analytical Results - Field Blanks
May 9, 2018
TestAmerica Laboratories, Inc., EPA Method 8260C
VOCs (ug/L)

Location	Depth	1,1 Dichloroethane	1,1,1 Trichloroethane	1,1,2 Trichloroethane	1,2 Dichloroethane	Benzene	Carbon Tetrachloride	Chloroform	Diethyl ether	Freon 113	Methylene Chloride	Tetrachloroethane	Trichloroethylene
SP-39	30	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.31 BJ	<1	<1
SP-40	15-20	<1	<1	<1	<1	<1	<1	0.24 J	<1	<1	0.25 BJ	<1	<1
SP-47	30	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.25 J	<1	<1
SP-48P	74.12-75.12	15	17	0.61 J	2.5	<1	21	290	1.1	3.5	0.32 J	1	50
The Garden Dept Spri		<1	<1	<1	<1	<1	<1	0.45 J	<1	<1	0.22 J	<1	<1
SSP Field Blank 1-2018@509		<1	<1	<1	<1	0.14 J	<1	<1	<1	<1	4.8	<1	<1
NYSDEC_TOGS111_ClassGA Standard/Guidance		5	5	1	0.6	1	5	7	n/a	5	5	5	5

	Indicates field blank and/or trip blank sample
	Indicates detection in field blank and/or trip blank sample

"J" value indicates estimated values

The Garden Dept Spri is an alias for Garden_Dept

The chemicals listed below were reported below the LRL:

1,1 Dichloroethane
1,1,1,2 Tetrachloroethane
1,1,2,2 Tetrachloroethane
1,2 Dichlorobenzene
1,3 Dichlorobenzene

APPENDIX C - SCDHS AND NYSDEC HISTORICAL DATA

Well Information		Field Parameters									VOC's																						
Monitoring Well ID	Screen Interval (feet below grade)	Sample Date	North	West	Location	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Methylene chloride	1,1-Dichloroethane	Chloroform	1,2-Dichloroethane	1,1,1-Trichloroethane	Carbon tetrachloride	tert-Amyl-Methyl-Ether	Trichloroethene	Tetrachloroethene	Freon 113	1,1-Dichloroethene	1,1,2-Trichloroethane	1,1,2,2-Tetrachloroethane	m,P-Dichlorobenzene	Diethyl ether	MTBE	1,1,1,2-Tetrachloroethane	Benzene	Chlorobenzene	o-Xylene	1,2-Dichlorobenzene (o)	1-Methylethylbenzne	
SP-1	35-40	2/4/2002	40.82718	-72.70158	Circle Place	NA	NA	NA	NA	NA	<0.5	<0.5	3	<0.5	<0.5	<0.5	<0.5	0.7	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	55-60	2/4/2002	40.82718	-72.70158		NA	NA	NA	NA	NA	<0.5	<0.5	4	<0.5	<0.5	<0.5	<0.5	2	3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	75-80	2/4/2002	40.82718	-72.70158		NA	NA	NA	NA	NA	<0.5	2	1200	7	58	160	<0.5	460	540	11	16	3	0.6	<0.5	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	95-100	2/4/2002	40.82718	-72.70158		NA	NA	NA	NA	NA	<0.5	<0.5	11	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SP-2	35-40	2/5/2002	40.82631	-72.70028	Elia Drive	NA	NA	NA	NA	NA	<0.5	<0.5	2	<0.5	<0.5	<0.5	<0.5	2	3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	55-60	2/5/2002	40.82631	-72.70028		NA	NA	NA	NA	NA	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	2	3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	75-80	2/5/2002	40.82631	-72.70028		NA	NA	NA	NA	NA	4	0.6	360	7	94	29	<0.5	1300	1300	0.7	24	11	2	<0.5	8	<0.5	2	34	2	61	5	1	
	95-100	2/5/2002	40.82631	-72.70028		NA	NA	NA	NA	NA		<0.5	24	<0.5	1	<0.5	<0.5	0.9	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SP-3	35-40	3/19/2002	40.82972	-72.70407		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	55-60	3/19/2002	40.82972	-72.70407		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	75-80	3/19/2002	40.82972	-72.70407		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	95-100	3/19/2002	40.82972	-72.70407		NA	NA	NA	NA	NA	<0.5	<0.5	2	<0.5	0.5	<0.5	<0.5	0.8	150	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
SP-4	35-40	3/22/2002	40.82847	-72.69874		NA	NA	NA	NA	NA	<0.5	<0.5	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	55-60	3/22/2002	40.82847	-72.69874		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	75-80	3/22/2002	40.82847	-72.69874		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	95-100	3/22/2002	40.82847	-72.69874		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
SP-5	35-40	3/25/2002	40.82792	-72.70111	Circle Place	NA	NA	NA	NA	NA	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	55-60	3/25/2002	40.82792	-72.70111		NA	NA	NA	NA	NA	<0.5	<0.5	2	<0.5	<0.5	<0.5	<0.5	0.6	4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	75-80	3/25/2002	40.82792	-72.70111		NA	NA	NA	NA	NA	<0.5	<0.5	600	2	25	130	<0.5	280	1000	2	11	2	1	0.7	3	<0.5	1	<0.5	0.6	<0.5	<0.5	<0.5	<0.5
	95-100	3/25/2002	40.82792	-72.70111		NA	NA	NA	NA	NA	3	<0.5	170	4	13	4	<0.5	29	4	1	4	<0.5	<0.5	<0.5	15	<0.5	<0.5	1	<0.5	<0.5	<0.5	<0.5	
SP-6	15-20	4/5/2002	40.843	-72.70083		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	25-30	4/5/2002	40.843	-72.70083		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	35-40	4/5/2002	40.843	-72.70083		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	45-50	4/5/2002	40.843	-72.70083		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	55-60	4/5/2002	40.843	-72.70083		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	65-70	4/5/2002	40.843	-72.70083		NA	NA	NA	NA	NA	<0.5	<0.5	2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	85-90	4/5/2002	40.843	-72.70083		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	105-110	4/5/2002	40.843	-72.70083		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	125-130	4/5/2002	40.843	-72.70083		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	145-150	4/5/2002	40.843	-72.70083		NA	NA	NA	NA	NA	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																				Metals							Inorganics				Coordinates								
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,p-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West		
SP-16	25-30	South West Corner of Wisteria and Montauk Highway, Speonk	8/9/07	4	1722.8	21.9	NA	14.2	6.71	463	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.8	0.6	<.5	<.5	1.4	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.91	471	<2	688	26	177	6	48	0.15	17.5	13.8	40.81922	-72.70278	
	35-40		8/9/07	7.1		21.9	NA	14.1	6.4	149	<.5	2.2	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.8	1.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.32	39	<2	1390	15	69	2	13	<.02	<.02	2				
	45-50		8/9/07	11.6		21.9	NA	14	6.2	178	0.6	3.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.8	1.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.65	47	<2	570	18	211	1	15	<.02	<.02	3.9				
	55-60		8/9/07	16.6		21.9	NA	13.8	6.44	169	1	5.4	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	7.5	2.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.7	0.22	42	<2	57	4	155	2	18	<.02	<.02	5.8				
	65-70		8/9/07	51.5		21.9	NA	13.4	6.8	55	3.6	17	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	22	8.2	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.51	36	<2	285	8	58	2	8	<.02	<.02	0.4				
	75-80		8/9/07	1632		21.9	NA	13.8	7.7	75	119	1030	<.5	31	1.1	0.9	1.3	0.7	<.5	238	190	20	17	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.2	<.5	1.35	158	<2	389	8	114	7	5	<.02	0.03			1.1
SP-17	25-30	Montauk Highway, Speonk	8/8/07	0	3.1	22.42	5.1	14.2	6.09	435	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.72	323	<2	764	15	553	22	12	<.02	0.03	1.3	40.81922	-72.70248
	35-40		8/8/07	0		22.42	6.67	14	5.56	193	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.08	63	<2	475	13	263	3	13	<.02	<.02	5.8			
	45-50		8/8/07	0		22.42	5.25	13.9	5.71	244	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.3	0.9	52	<2	198	13	71	3	18	<.02	<.02	3.9				
	55-60		8/8/07	0		22.42	6.49	13.5	5.64	250	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.1	0.53	74	<2	113	9	129	2	20	<.02	<.02	3.4				
	65-70		8/8/07	1.6		22.42	4.57	13.2	6.2	217	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1	1.8	55	<2	170	5	40	3	19	<.02	0.03	4.1			
	75-80		8/8/07	1.5		22.42	3.89	13	6.93	245	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1	1.32	110	<2	88	2	35	2	13	<.02	0.05	6.4			
SP-18	25-30	In front of house # 219 Montauk Highway, Speonk	8/8/07	3	1969.3	23.23	3.99	14.7	6.34	447	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.7	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.91	555	<2	290	3	37	2	29	<.02	0.07	3.3	40.81920	-72.70210
	35-40		8/8/07	6.9		23.23	NA	14.8	6.12	285	<.5	3.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.6	1.2	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.19	691	<2	282	6	219	8	18	<.02	0.14	5.4			
	45-50		8/8/07	12.2		23.23	NA	14.7	5.67	254	0.6	4.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.4	2.3	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.8	874	<2	178	4	707	7	15	0.07	0.37	8.8			
	55-60		8/8/07	15		23.23	NA	14.9	6.25	100	0.9	5.2	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.6	3.3	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.38	504	<2	<50	3	293	2	17	<.02	0.05	1.4			
	65-70		8/8/07	50.8		23.23	4.1	14.9	7.13	131	2.9	23	<.5	1.3	<.5	<.5	<.5	<.5	<.5	<.5	12	11	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.47	268	<2	<50	2	94	3	10	<.02	0.04	1.4			
	75-80		8/8/07	1881.4		23.23	2.31	14.2	8.32	96	144	1160	<.5	68	1.1	<.5	9.3	<.5	<.5	<.5	208	266	25	19	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.6	<.5	2.47	575	<2	56	5	339	12	12	<.02	0.03		
SP-19	25-30	Montauk Highway, Speonk	8/23/07	0.5	451.5	26.18	2.6	14.8	7.02	195	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	6	133	<2	188	3	15	1	26	<.02	0.08	2.5	40.81917	-72.70172
	35-40		8/23/07	0.6		26.18	3.37	14	6.59	270	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.2	2.79	89	<2	<50	1	14	<1	20	<.02	0.07	2.1			
	45-50		8/23/07	1.7		26.18	6.63	13.3	6.49	159	<.5	0.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.8	1.83	42	<2	<50	1	22	<1	16	<.02	<.02	1.4			
	55-60		8/23/07	3.3		26.18	8.38	13.7	7	81.6	<.5	1.4	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.2	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.97	123	<2	<50	4	89	3	13	<.02	<.02	0.5			
	65-70		8/23/07	26.1		26.18	6.99	13.5	7.28	92.1	1.5	14	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	4.9	4.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.41	114	<2	<50	2	18	<1	15	<.02	0.02	0.7			
	75-80		8/23/07	419.3		26.18	3.34	12.8	8.5	62.5	25	232	0.6	16	<.5	0.5	2.8																																	

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																				Metals								Inorganics				Coordinates						
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,p-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West	
SP-21	25-30	22' East of Pole # 7005 Montauk Highway, Speonk	9/6/07	0	134.1	22	3.46	14.3	7.08	186	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.6	167	<2	101	10	515	12	21	<.02	0.08	2.4	40.81908	-72.70024	
	35-40		9/6/07	0.6		22	3.41	13.5	6.96	135	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.47	190	<2	<50	3	160	5	18	<.02	0.07	0.7				
	45-50		9/6/07	0.7		22	6.1	13.5	6.99	174	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.19	290	<2	<50	1	62	<1	15	<.02	<.02	1				
	55-60		9/6/07	0.6		22	6.17	13.3	7.01	266	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.21	207	<2	<50	<1	38	1	17	<.02	<.02	1.7				
	65-70		9/6/07	2.8		22	6.55	13.1	7.07	150	<.5	2.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.26	28	<2	<50	1	30	1	12	<.02	<.02	1.6				
	75-80		9/6/07	129.4		22	4.26	13	7.24	48	5.3	88	<.5	7.4	<.5	<.5	<.5	0.7	<.5	<.5	6	22	<.5	1.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.51	389	<2	<50	3	317	6	5	<.02	<.02	<.2			
SP-22	25-30	Montauk Highway, Speonk	9/5/07	0	906.3	22	3.38	13.4	7.13	122	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.09	107	<2	<50	2	29	1	18	<.02	0.04	1.9	40.81902	-72.69951	
	35-40		9/5/07	1.2		22	3.48	12.9	6.91	154	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.6	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.81	195	<2	<50	3	215	5	15	<.02	0.06	2.5			
	45-50		9/5/07	2		22	6.84	12.8	6.74	177	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.7	0.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.31	166	<2	<50	2	570	2	13	<.02	<.02	3.6			
	55-60		9/5/07	3.9		22	7	12.7	6.93	124	<.5	1.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.2	1.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.58	111	<2	<50	2	269	3	8	<.02	<.02	3.1			
	65-70		9/5/07	23.1		22	7.36	12.6	7.26	68	1.3	9.3	<.5	0.8	<.5	<.5	<.5	<.5	<.5	5.5	6.2	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.53	43	<2	<50	2	76	2	7	<.02	<.02	0.6			
	75-80		9/5/07	876.1		22	3.84	12.5	7.45	49	56	497	1.1	37	<.5	1.2	3.8	<.5	<.5	98	167	15	5.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.4	<.5	2.28	159	<2	<50	6	380	16	6	<.02			<.02
SP-23	25-30	Wisteria Drive, Speonk	9/17/07	0	677.3	20.125	34.1	13.6	6.25	375	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.84	101	<2	<50	2	57	4	18	<.02	0.03	4	40.81788	-72.70310
	35-40		9/17/07	0.9		20.125	67	13.2	6	145	<.5	0.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.1	100	<2	<50	<1	34	1	15	<.02	<.02	1		
	45-50		9/17/07	0.8		20.125	86.7	13.1	5.3	119	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.38	59	<2	175	2	162	<1	11	<.02	<.02	0.6			
	55-60		9/17/07	1.5		20.125	87.2	13.1	5.12	102	<.5	1.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.91	78	<2	59	2	92	2	7	<.02	<.02	2.1			
	65-70		9/17/07	1.4		20.125	70.8	14	5.59	220	<.5	1.4	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.95	97	<2	<50	2	63	2	11	<.02	0.03	3.6			
	75-80		9/5/07	132.1		19.91	6.46	13.4	6.44	118	14	89	<.5	3.4	<.5	<.5	<.5	<.5	<.5	<.5	12	12	1.7	2.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.92	531	<2	<50	<1	46	<1	8	<.02	<.02	0.5		
	85-90		9/5/07	540.6		19.91	6.38	13	6.83	62.8	52	360	<.5	17	0.6	<.5	<.5	<.5	<.5	<.5	37	66	8	14	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.9	<.5	0.59	367	<2	<50	<1	91	2	5	<.02	<.02	0.5		
	95-100		9/5/07	0		19.91	0.09	14.5	9.69	86.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	7.85	671	<2	<50	12	2070	37	5	<.02	0.03	<.2			
SP-24	25-30	Garland Street, Speonk	10/2/07	0	4.5	21.62	4.6	13.1	6.2	111	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.1	46	<2	63	2	21	<1	14	<.02	<.02	1.9	40.81660	-72.70288	
	35-40		10/2/07	0.8		21.62	13.5	13	6.2	120	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.19	55	<2	<50	2	14	<1	15	<.02	<.02	4.3			
	45-50		10/2/07	0.9	</																																												

Speonk Profile Wells

[illegible]

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																								Metals								Inorganics				Coordinates			
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,P-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West		
SP-29	35-40	Montauk Highway, Speonk	12/18/07	0	242.4	24.82	5.14	12.3	5.98	124	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.19	451	<2	133	5	259	8	14	<.1	NA	2.5	40.81893	-72.69890
	45-50		12/18/07	0		24.82	7.34	11.7	5.83	123	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.1	177	<2	<50	3	168	4	12	<.1	NA	0.4				
	55-60		12/18/07	1		24.82	9.14	11.4	5.81	104	<.5	1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.86	68	<2	<50	2	48	1	7	<.1	NA	<.2				
	65-70		12/18/07	4.6		24.82	8.18	11.3	6.12	112	<.5	2.3	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.2	1.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.21	115	<2	<50	2	69	2	7	<.1	NA	0.2			
	75-80		12/18/07	236.8		24.82	7.05	11.2	6.42	49.6	19	109	<.5	13	<.5	<.5	0.8	<.5	<.5	33	56	6	1.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.29	139	<2	<50	<1	35	<1	7	<.1	NA	<.2		
SP-30	35-40	South West Corner of Nidzyn Avenue and Montauk Highway, Speonk	1/7/08	0	2.5	25.295	4.78	11.7	5.81	74.3	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.67	98	<2	<50	3	76	3	9	<.1	NA	0.8	40.81895	-72.69837
	45-50		1/7/08	0		25.295	7.31	11.4	5.56	88.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.12	94	<2	<50	3	92	2	15	<.1	NA	0.9			
	55-60		1/7/08	1.1		25.295	6.69	11.3	5.66	168	<.5	1.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.03	81	<2	<50	3	64	4	13	<.1	NA	3			
	65-70		1/7/08	0.7		25.295	7.97	11.4	5.68	177	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.3	8	<2	<50	3	39	2	7	<.1	NA	2.8			
	75-80		1/7/08	0.7		25.295	7.95	11.3	6.36	133	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.6	0.63	72	<2	<50	2	78	4	7	<.1	NA	4.7		
SP-31	25-30	Matthews Drive, Speonk	12/19/07	0	65.6	23.38	2.04	13.1	5.55	177	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.71	148	<2	<50	12	562	4	16	<.1	NA	5.5	40.81877	-72.69925
	35-40		12/19/07	0		23.38	353	12.4	5.54	131	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.96	108	<2	<50	3	121	2	12	<.1	NA	1.4			
	45-50		12/19/07	0		23.38	7.655	12	5.39	240	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.6	1.43	232	<2	<50	2	563	2	15	<.1	NA	1.8			
	55-60		12/19/07	0.9		23.38	6.64	11.8	5.74	103	<.5	0.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.6	113	<2	<50	1	59	2	9	<.1	NA	1.8			
	65-70		12/19/07	1		23.38	6.67	11.6	6.02	118	<.5	1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.99	184	<2	<50	2	21	<1	5	<.1	NA	11		
	75-80		12/19/07	63.7		23.38	2.8	11.4	6.04	211	3	30	<.5	1.7	<.5	<.5	<.5	<.5	<.5	<.5	13	15	1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.8	1.22	140	<2	<50	1	62	2	8	<.1	NA	3.1		
SP- 32	25-30	Montauk Highway, Speonk	5/5/08	0	2.1	21.4	4.9	12.9	6.3	353	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.05	25	<2	<50	2	78	2	10	<0.1	NA	7.5	40.81932	-72.70388
	35-40		5/5/08	0		21.4	5.46	13.5	5.84	398	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.46	13	<2	<50	1	32	1	15	<0.1	NA	6.8			
	45-50		5/5/08	0		21.4	6.1	13.7	4.97	457	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.45	190	<2	117	3	993	2	21	<0.1	NA	5.5			
	55-60		5/5/08	0		21.4	7	13.5	4.75	162	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.22	208	<2	<50	2	804	2	8	<0.1	NA	6.4			
	65-70		5/5/08	0.7		21.4	7.7	13.3	6.32	55	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.84	87	<2	<50	1	41	1	8	<.1	NA	0.6			
	75-80		5/5/08	1.4		21.4	1.2	13.6	6.58	86	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.67	800	<2	<50	<1	181	3	5	<.1	NA	1.8			

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																				Metals							Inorganics				Coordinates							
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,P-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West	
SP- 34	25-30	Garland Street at the fork in the wooded area	5/7/08	5.5	15.8	21.9	2.41	13.5	5.86	211	<.5	5.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	7.45	245	<2	<50	4	310	9	13	<.1	NA	4.2	40.81635	-72.70205
	35-40		5/7/08	0.9		21.9	3.79	13.6	5.16	280	<.5	0.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	6.55	720	<2	100	7	3160	16	24	<.1	NA	12.9				
	45-50		5/7/08	0		21.9	5.65	13.8	5.11	326	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.6	0.57	131	<2	<50	3	404	2	21	<.1	NA	5				
	55-60		5/7/08	0.6		21.9	5.27	13.7	5.15	189	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.8	0.35	84	<2	<50	2	522	3	19	<.1	NA	3.2				
	65-70		5/7/08	0.8		21.9	5.66	13.7	5.68	222	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2	1.22	112	<2	<50	2	131	3	22	<.1	NA	3.6			
	75-80		5/7/08	8		21.9	6.4	13.6	5.84	326	0.5	3.2	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.9	2.4	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.3	0.7	352	<2	<50	<1	14	<1	18	<.1	NA	3.9		
SP-34D	110-115	Garland Street at the fork in the wooded area	8/21/08	33.6	33.6	22	6	13.2	6.8	85.4	4.4	25	<.5	1.8	<.5	<.5	<.5	<.5	<.5	<.5	1.3	1.1	0.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	53	<2	<50	<1	53	1	5	<0.1	NA	0.9	40.81633	-72.70210	
SP-35	25-30	Mathews Drive, Speonk	5/15/08	0	237.9	22.1	5.41	13.1	6.21	235	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.16	64	<2	<50	1	32	2	16	<0.1	NA	1.1	40.81788	-72.69973
	35-40		5/15/08	0		22.1	2.32	13.5	5.34	273	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.91	162	<2	69	4	327	2	17	<0.1	NA	10		
	45-50		5/15/08	0		22.1	7.25	13.5	5.27	145	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.15	34	<2	<50	4	104	<1	18	<0.1	NA	1.1			
	55-60		5/15/08	0.9		22.1	7.6	13.5	5.61	154	<.5	0.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.9	0.12	42	<2	<50	4	7	<1	17	<0.1	NA	0.7			
	65-70		5/15/08	1.9		22.1	7.29	13	5.98	237	<.5	1.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.5	0.81	45	<2	<50	<1	26	<1	11	<0.1	NA	1.6			
	75-80		5/15/08	235.1		22.1	4.03	13	6.55	64	11	167	<.5	16	<.5	<.5	1.3	<.5	<.5	5.1	28	6.7	4.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.6	<.5	2.83	479	<2	<50	6	683	8	9	<0.1	NA		
SP-36	25-30	Mathews Drive, Speonk	5/6/08	2.5	1292.9	21.8	2.49	13.2	6.36	317	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.9	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.63	83	<2	<50	3	172	6	9	<.1	NA	2	40.81830	-72.69948
	35-40		5/6/08	5.6		21.8	4.99	13.3	5.81	131	<.5	2.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.4	1.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.8	4	136	<2	<50	3	164	5	15	<.1	NA	1.3			
	45-50		5/6/08	3.7		21.8	6.95	13.2	5.52	192	<.5	1.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.1	0.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.7	2.36	111	<2	<50	3	310	3	17	<.1	NA	1.5			
	55-60		5/6/08	5.4		21.8	7.7	13.1	5.24	194	<.5	2	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.8	1.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.3	0.62	111	<2	<50	2	311	1	8	<.1	NA	2			
	65-70		5/6/08	22.1		21.8	8.8	13	6.13	102	1.6	8.2	<.5	0.9	<.5	<.5	<.5	<.5	<.5	5.4	6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.64	42	<2	<50	1	28	1	6	<.1	NA	0.6				
	75-80		5/6/08	1253.6		21.8	4.5	12.9	6.27	46	78	641	<.5	65	0.5	<.5	4.1	<.5	<.5	156	286	23	11	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.6	<.5	0.83	223	<2	<50	1	113	3	6	<.1	NA		
SP-37	25-30	In front of house #14 Nidzyn Drive, Speonk	5/13/08	0	1.7	23.3	5.9	13.6	5.56	232	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.41	90	<2	<50	4	239	2	15	<.1	NA	6.9	40.81710	-72.69915
	30-35		5/13/08	0		23.3	5.93	13.7	5.34	276	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.39	148	<2	<50	5	152	2	12	<.1	NA	5.6			
	40-45		5/13/08	0		23.3	6.21	13.7	5.68	359	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.95	44	<2	<50	4	63	1	21	<.1	NA	3.2			
	50-55		5/13/08	0		23.3	6.76	13.7	5.02	224	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.4				
	60-65		5/13/08	1		23.3	8.98	13.4	5.65	82	<.5	1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.3				
	70-75		5/13/08	0.7		23.3	7.77	13.4	6.35	69	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.13	78	<2	<50	<1	21	<1	5	<.1	NA	0.5		

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																												Metals							Inorganics				Coordinates	
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,P-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West			
SP- 38	25-30	Bridle Path, Speonk	5/14/08	0	0	21.3	6.06	12.6	5.74	205	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.79	40	<2	<50	5	69	<1	16	<.1	NA	2	40.81698	-72.69720		
	35-40		5/14/08	0		21.3	5.07	12.9	5.68	289	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.8	3.81	154	<2	101	3	35	<1	18	<.1	NA	2					
	45-50		5/14/08	0		21.3	6.6	12.9	5.26	99.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	53	<2	<50	2	41	<1	13	<.1	NA	0.9						
	55-60		5/14/08	0		21.3	7.18	13	5.5	153	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.9	0.22	53	<2	<50	2	7	<1	11	<.1	NA	3					
	65-70		5/14/08	0		21.3	6.47	12.7	5.67	160	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.51	18	<2	<50	1	23	<1	10	<.1	NA	3.3					
	75-80		5/14/08	0		21.3	6.26	12.7	5.77	137	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.3	86	<2	<50	1	30	1	9	<.1	NA	3.5				
SP- 39	25-30	Horseshoe lane, Speonk	7/9/08	1.1	3.9	18.66	1.3	16.3	8.42	167	<.5	1.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.76	1470	<2	<50	1	40	2	15	<0.1	NA	1.3	40.81193	-72.70002	
	35-40		7/9/08	0		18.66	2.14	15.8	8.16	227	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.11	1220	<2	<50	1	38	2	19	<0.1	NA	2.6					
	45-50		7/9/08	0		18.66	0.25	15.5	8.01	261	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	10.4	1260	<2	<50	1	78	<1	31	0.2	NA	6.5					
	55-60		7/9/08	1.1		18.66	1.85	14.7	7.7	204	<.5	1.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.8	1060	<2	<50	3	154	<1	25	<0.1	NA	3.2					
	65-70		7/9/08	1		18.66	4.13	13.9	7.7	167	<.5	1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.63	919	<2	<50	1	<5	<1	21	<0.1	NA	2					
	75-80		7/9/08	0.7		18.66	0.6	13.6	7.72	260	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.47	1130	<2	<50	<1	16	<1	32	<0.1	NA	3.9				
SP- 40	15-20	In front of house # 12 Bridle Path, Speonk	7/10/08	0	3.9	7.8	0.34	16.4	7.84	354	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	6.33	802	<2	<50	2	59	1	28	<.1	NA	3.2	40.81127	-72.69855	
	25-30		7/10/08	0		7.8	2	14	7.59	158	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.01	1530	<2	<50	2	124	3	15	<.1	NA	2.8					
	35-40		7/9/08	0		8.26	4.21	13.8	6.98	179	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.63	1490	<2	<50	3	166	4	25	<0.1	NA	2.3					
	45-50		7/9/08	0.8		8.26	1.02	15.1	7.04	233	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.6	5.98	559	<2	<50	3	6	<1	22	<0.1	NA	4.1					
	55-60		7/9/08	3.1		8.26	0.25	14.5	7.11	270	<.5	3.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.6	7.68	915	<2	<50	1	26	1	26	<0.1	NA	6.4					
	65-70		7/9/08	0		8.26	0.22	14.4	7.06	274	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.7	4.37	542	<2	<50	<1	9	1	31	<0.1	NA	5.5					
	75-80		7/9/08	0		8.26	0.15	13.3	6.92	237	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3	4.33	527	<2	<50	<1	28	<1	24	<0.1	NA	1.6					

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																				Metals							Inorganics				Coordinates									
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,p-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West			
SP- 41	25-30	In Front of House #41 Nidzyn Avenue, Speonk	8/5/08	0	0.7	19.9	4.92	15.5	6.92	190	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	7	285	<2	<50	2	7	<1	18	<0.1	NA	1.2	40.81255	-72.70157	
	35-40		8/5/08	0		19.9	4.78	13.9	6.95	179	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.02	154	<2	<50	<1	10	<1	19	<0.1	NA	0.6					
	45-50		8/5/08	0		19.9	5.99	14.5	5.52	188	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.21	207	<2	<50	2	321	2	21	<0.1	NA	2.9					
	55-60		8/5/08	0		19.9	7.51	14	4.95	209	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.17	136	<2	<50	1	519	1	34	<0.1	NA	3					
	65-70		8/5/08	0		19.9	5.85	13.8	5.79	180	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.01	226	<2	<50	5	235	3	34	<0.1	NA	3.2					
	75-80		7/16/08	0.7		20.01	5.16	13	6.23	257	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.73	787	<2	91	3	146	2	21	<0.1	NA	3.4				
SP- 42	25-30	In Front of House #21 Nidzyn Avenue, Speonk	7/16/08	0	7.6	22.61	1.9	14.4	7.98	245	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.55	414	<2	<50	1	6	<1	14	<0.1	NA	2.1	40.81600	-72.69973
	35-40		7/16/08	0.6		22.61	2.88	13.5	7.95	388	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.9	392	<2	<50	1	37	1	21	<0.1	NA	3.4				
	45-50		7/16/08	0		22.61	1.15	13.7	7.83	378	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	8.55	323	<2	121	4	47	<1	19	<0.1	NA	5				
	55-60		7/16/08	0.6		22.61	1.24	14.1	7.71	331	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.23	246	<2	<50	5	89	2	9	<0.1	NA	3.9				
	65-70		7/16/08	3.5		22.61	5.56	14	7.64	96.1	<.5	3.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.1	222	<2	<50	1	6	<1	6	<0.1	NA	1.6				
	75-80		7/16/08	2.9		22.61	5.3	13.7	6.92	168	<.5	2.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.96	438	<2	<50	12	57	2	6	<0.1	NA	3.3				
SP-43	25-30	In Front of House #20 Matthews Drive, Speonk	7/22/08	0	1.4	21.9	1.69	16.1	6.44	242	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.91	511	<2	574	<1	<5	<1	13	<0.1	NA	5	40.81617	-72.70118
	35-40		7/22/08	0		21.9	3.72	14.7	6.24	253	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.78	143	<2	717	2	<5	<1	13	<0.1	NA	4.5			
	45-50		7/22/08	0		21.9	1.67	15	6.26	365	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.97	148	<2	391	2	6	<1	17	<0.1	NA	1.3				
	55-60		7/22/08	0.6		21.9	7.95	13.7	5.77	268	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.6	6	24	<2	98	6	6	<1	13	<0.1	NA	3.8					
	65-70		7/22/08	0.8		21.9	9.13	12.9	5.79	243	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.7	0.62	94	<2	<50	9	8	<1	10	<0.1	NA	3.5			
SP-44	25-30	Matthews Drive, Speonk end of the road	8/7/08	4.4	14	18.08	3.8	14.2	6.47	155	<.5	4.4	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.67	120	<2	942	5	11	<1	12	<0.1	NA	2.2	40.81318	-72.70308
	35-40		8/7/08	2.8		18.08	4.3	13.3	6.26	191	<.5	2.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	8.12	586	<2	395	4	26	<1	23	<0.1	NA	5				
	45-50		8/7/08	0.9		18.08	8.5	13.6	5.92	218	<.5	0.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.83	137	<2	<50	3	7	<1	23	<0.1	NA	6.5				
	55-60		8/7/08	0.7		18.08	4.02	13.6	5.89	283	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.3	35	<2	98	6	6	<1	19	<0.1	NA	5.5				
	65-70		8/7/08	5.2		18.08	5.56	13.1	5.39	278	<.5	5.2	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.14	136	<2	<50	4	98	<1	17	<0.1	NA	5.2				

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																				Metals							Inorganics				Coordinates								
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,P-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West		
SP-45	25-30	Wisteria Drive, Speonk In front of house #20	7/31/08	0	0	17.91	6.82	17.7	5.8	157	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.51	64	<2	487	12	54	2	20	<.1	NA	2.4	40.81438	-72.70492	
	35-40		7/31/08	0		17.91	7.37	15.2	5.46	131	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.96	122	<2	510	10	277	<1	22	<.1	NA	2.3					
	45-50		7/31/08	0		17.91	6.43	14.8	6.17	156	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.7	0.44	121	<2	145	2	<5	<1	8	<.1	NA	6					
	55-60		7/31/08	0		17.91	3.61	14.2	6.29	256	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.86	154	<2	<50	<1	<5	<1	13	<.1	NA	8.7					
	65-70		7/31/08	0		17.91	4.12	13.9	5.37	315	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.33	280	<2	68	4	70	2	18	<.1	NA	5.7			
SP-46	25-30	Wisteria Drive, Speonk In front of House # 9	7/31/08	0	0	18.97	0.11	15	6.84	501	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	8.82	838	<2	520	6	1010	9	15	<.1	NA	33.7	40.81637	-72.70367
	35-40		7/31/08	0		18.97	0.16	14.4	6.17	384	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.08	93	<2	171	4	103	4	32	<.1	NA	<.2			
	45-50		7/31/08	0		18.97	0.19	14.1	4.35	469	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2	7140	<2	119	<1	15	2	26	<.1	NA	<.2				
	55-60		7/30/08	0		18.97	0.19	14.1	8.4	568	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.23	18000	<2	75	3	<5	1	24	<.1	NA	<.2				
	65-70		7/30/08	0		18.97	0.09	14.8	8.37	579	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.57	20300	<2	51	3	18	2	19	<.1	NA	<.2				
	75-80		7/30/08	0		18.97	0.2	14.1	8.19	534	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.4	7.95	<2	<50	5	35	1	22	<0.1	NA	1.7			
SP-47	25-30	Bridle Path, Speonk In Front of house #43	8/4/08	1.2	1.2	21.51	6.12	15.1	6.69	224	<.5	1.2	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	20	<2	<50	9	18	<1	13	<0.1	NA	4.5	40.81623	-72.69775
	35-40		8/4/08	0		21.51	6.8	14.3	6.14	348	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.2	34	<2	<50	5	55	2	17	<.1	NA	11				
	45-50		8/4/08	0		21.51	7.64	13.8	6.36	267	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.22	202	<2	80	2	18	<1	17	<0.1	NA	4.8				
	55-60		8/4/08	0		21.51	9.29	15.1	6.7	250	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.39	234	<2	<50	5	26	<1	13	<.1	NA	1.5				
	65-70		8/4/08	0		21.51	8.7	14.7	6.6	198	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.6	0.64	72	<2	<50	3	87	<1	14	<0.1	NA	4.1			
	75-80		8/4/08	0		21.51	6.98	13.8	7.37	186	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.22	515	<2	<50	2	84	3	9	<.1	NA	5.5			

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P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																				Metals							Inorganics				Coordinates							
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,p-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyl-disulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West	
SP-48	110-115	Bridle Path, Speonk In Front of house #41	8/20/08	0	0	18.9	6.74	13.1	6.46	90.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	6	6	<2	<50	<1	6	1	13	<0.1	NA	0.7	40.81558	-72.69795
SP-53	30-35	Corner of Leslie Ct and N Phillips Ave	3/25/09	2.7	115.1	27.95	9.75	12.8	5.76	129	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	819	<1	<50	<1	14	<1	11	<0.1	NA	1.3	40.82603	-72.70023
	40-45		3/25/09	0		27.95	10.16	12.6	5.52	63	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	43	<1	<50	<1	20	<1	8	<0.1	NA	0.3				
	50-55		3/25/09	3.7		27.95	10.94	12.3	5.84	46	<.5	0.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	38	<1	<50	<1	<5	<1	8	<0.1	NA	<0.2			
	60-65		3/25/09	2		27.95	10.9	11.9	5.95	49	<.5	1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	15	<1	<50	<1	<5	<1	8	<0.1	NA	<0.2				
	70-75		3/25/09	16.7		27.95	9.56	11.8	6.22	55	<.5	1.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	14	1.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	16	<1	<50	<1	<5	<1	8	<0.1	NA	0.4			
	80-85		3/25/09	90		27.95	9.34	11.6	6.23	49	<.5	4.9	<.5	1.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	65.0	19.0	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	4	<1	<50	<1	<5	<1	8	<0.1	NA	0.3		
SP-54 (3/4")	75-80	Leslie Ct	3/26/09	8.2	8.2	28.92	6.57	10.9	6.71	55	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	7.1	1.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<2	<.5	<2	<.5	<.5	0.64	253	<1	237	3	97	3	7	<0.1	NA	0.3	40.82587	-72.69973
SP-54 (2")	30-35	Leslie Ct	4/15/09	6.4	67.4	27.58	8.13	12.5	5.56	174	<.5	6.4	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	24	<1	<50	<1	9	<1	17	<0.1	NA	1.5	40.82578	-72.69971
	40-45		4/15/09	0.6		27.58	8.92	12.6	5.55	255	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	38	<1	<50	<1	9	<1	20	<0.1	NA	1.5			
	50-55		4/15/09	0.8		27.58	10.79	12.5	5.61	43	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	20	<1	<50	<1	<5	<1	8	<0.1	NA	<0.2			
	60-65		4/15/09	0.8		27.58	10.38	12.3	5.64	53	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	24	<1	<50	<1	<5	<1	8	<0.1	NA	0.2			
	70-75		4/15/09	6.5		27.58	10.04	12.1	5.93	52	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.9	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	8	<1	<50	<1	<5	<1	7	<0.1	NA	0.6		
	80-85		4/15/09	52.3		27.58	9.02	11.9	6.04	46	0.6	21.0	<.5	1.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	9.3	19.0	0.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	4	<1	<50	<1	<5	<1	7	<0.1	NA	<0.2		
SP-55	30-35	Leslie Ct	5/13/09	0	33.4	27.17	8.35	14	4.99	148	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	95	<1	<50	<1	433	<1	19	<0.1	<0.02	3.4	40.82554	-72.69921
	40-45		5/13/09	1		27.17	9.83	13.9	5.39	110	<.5	1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	13	<1	<50	<1	10	<1	7	<0.1	<0.02	0.9			
	50-55		5/13/09	1.8		27.17	10.76	13.6	5.66	52	<.5	1.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	3	<1	<50	<1	<5	<1	9	<0.1	<0.02	<2			
	60-65		5/13/09	0		27.17	10.02	13.6	5.81	53	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	2	<1	<50	<1	<5	<1	8	<0.1	<0.02	0.4			
	70-75		5/13/09	0		27.17	8.98	13.3	5.83	54	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	1	<1	<50	<1	<5	<1	8	<0.1	<0.02	0.3			
	80-85		5/13/09	30.6		27.17	8.97	13.2	7.14	48	<.5	27.0	<.5	1.5	<.5	<.5	0.5	<.5	<.5	<.5	<.5	0.9	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<0.1	2	<1	<50	1	<5	<1	6	<0.1	<0.02	<2		

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk Profile Wells

Well Information			Field Parameters								VOC's																										Metals							Inorganics				Coordinates																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,P-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
SP-56	30-35	Windmere Ct.	5/11/09	1.4	1091	25.86	7.3	13.5	5.12	135	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.4	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																						Metals							Inorganics				Coordinates					
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	1,1,1,2,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,P-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West	
SP-61	35-40	Old Country Road	3/11/10	0	1.7	28.82	3.41	10.8	6.72	84.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.16	1030	<1	<60	3	246	11	<15	<.3	NA	<1.5	40.82994	-72.70391
	45-50		3/11/10	0.5		28.82	5.24	10.7	6.84	49.8	<.5	0.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.56	705	<1	<60	<1	13	<1	6	<.1	NA	<.5				
	55-60		3/11/10	0		28.82	7.51	10.4	6.73	40	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.95	515	<1	<60	<1	<5	<1	5	<.1	NA	<.5				
	65-70		3/11/10	1.2		28.82	9	10.7	6.68	52	<.5	1.2	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.17	200	<1	<60	<1	7	<1	6	<.1	NA	<.5				
	75-80		3/11/10	0		28.82	3.85	10.6	7.55	55	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.12	290	<1	<60	<1	12	<1	6	<.1	NA	<.5			
SP-62	25-30	Old Country Road	4/13/10	4.3	5.4	24.56	2.37	11.4	6.25	108	<.5	4.3	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.29	230	<1	<60	2	23	2	14	<.4	NA	<2	40.82980	-72.70345
	35-40		4/13/10	0		24.56	7.17	11.6	6.03	67	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.43	24	<1	<60	2	49	2	8	<.1	NA	1.3			
	45-50		4/13/10	0		24.56	7	11.5	6.41	45	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.73	35	<1	<60	2	47	2	<15	<.3	NA	<1.5			
	55-60		4/13/10	0		24.56	8.8	11.4	5.8	30	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.1	5	<1	<60	<1	<5	<1	5	<.1	NA	<.5			
	65-70		4/13/10	1.1		24.56	8.54	11.2	5.93	37.5	<.5	1.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.24	17	<1	<60	<1	10	<1	6	<.1	NA	<.5			
	75-80		4/13/10	0		24.56	6.24	11.1	5.78	37	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.14	18	<1	<60	<1	19	<1	7	<.1	NA	<.5		
SP-64	45-50	18 Drew Drive, Speonk	3/24/10	0	0	30.58	5.98	13	6.3	110	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.52	196	<1	<60	4	62	<1	16	<.1	<.02	1	40.82706	-72.70810
	55-60		3/24/10	0		30.58	5.86	13.2	6.4	45.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.18	49	<1	<60	<1	25	<1	8	<.1	<.02	<.5			
	65-70		3/24/10	0		30.58	3.16	12.7	6.5	177	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.94	212	<1	<60	3	57	3	44	<.1	<.02	0.7			
	75-80		3/24/10	0		30.58	5.25	11.9	6.6	68	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.89	94	<1	<60	3	106	2	<20	<.4	<.02	<2			
SP-63	30-35	Howell Place and Laura Court	10/14/10	0	10.8	30	6.02	14.4	5.33	261	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	663	<1	<60	<1	40	1	32	<0.2	NA	3.4	40.82819	-72.70611	
	40-45		10/14/10	0		30	6.29	13.1	5.43	235	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.14	753	<1	<60	<1	121	<1	<50	<1.0	NA	<5.0			
	50-55		10/14/10	0.6		30	9.20	12.6	5.7	47	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	70	<1	<60	<1	73	<1	<250	<5.0	NA	<25.					
	60-65		10/14/10	0.6		30	6.80	12.8	6.73	57	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.19	150	<1	<60	<1	76	<1	<250	<5.0	NA	<25.			
	70-75		10/14/10	0		30	1.50	15	6.55	152	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.66	656	1	<60	<1	74	1	<50	<1.0	NA	<5.0			
	80-85		10/14/10	0		30	1.80	13.1	6.32	148	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.39	403	<1	<60	<1	101	<1	<50	<1.0	NA			<5.0
	90-95		10/12/10	9.6		30	NA	15.4	5.46	77	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	8.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.51	311	2	<60	<1	255	2	<250	<5.0	NA	<25.			
	150-155		10/7/10	0		27.7	0.33	15.7	7.04	75	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.24	337	<1	<60	<1	34	<1	<50	<1.0	NA			<5.0
	160-165		10/6/10	0		27.7	0.48	13.9	6.98	83	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.92	214	2	<60	<1	168	<1	<500	<10	NA			<50

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																						Metals								Inorganics				Coordinates					
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,p-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West		
SP-63 A	30-35	30 Howell Place	11/23/10	0	24.2	27.2	6.44	13.8	5.72	214	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	< 0.1	64	<1	<50	<1	153	<1	21	< 0.1	NA	2.4	40.82800	-72.70474	
	40-45		11/23/10	0		27.2	6.70	12.9	6.12	87	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	< 0.1	11	<1	<50	<1	17	<1	9	< 0.1	NA	0.8				
	50-55		11/23/10	0		27.2	8.30	12.6	5.7	33	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	< 0.1	9	<1	<50	<1	6	<1	5	< 0.1	NA	< 0.5				
	60-65		11/23/10	1.1		27.2	7.60	12.6	5.72	43	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	< 0.1	18	<1	<50	<1	72	<1	6	< 0.1	NA	<0.5				
	70-75		11/22/10	0		27.4	4.90	12.3	6.02	49	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	< 0.1	16	<1	<50	<1	7	<1	7	< 0.1	NA	< 0.5				
	80-85		11/22/10	9.5		27.4	8.00	12.5	6.16	72	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	6.8	2.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.1	17	<1	<50	<1	71	<1	< 15	< 0.3	NA			< 1.5
	90-95		11/22/10	9.1		27.4	5.40	12	6.71	56	<0.5	4.7	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	1.2	2.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.43	21	<1	<50	<1	376	2	< 50	< 1.0	NA	< 5				
	100-105		10/28/10	3.7		27	7.09	12.5	6.44	54	<0.5	3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.13	16	<1	<50	<1	39	2	6	<0.1	NA	<0.5			
	110-115		10/28/10	0.8		27	1.68	12.4	6.64	58	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.32	40	<1	<50	<1	150	1	<5	<0.1	NA	<0.5				
SP-63 B	30-35	34 Howell Place	10/28/10	0	33.7	25	6.65	14.5	5.48	72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.11	58	<1	<50	<1	55	<1	14	<0.1	NA	0.9	40.82783	-72.70405		
	40-45		10/28/10	0		25	6.78	13.5	5.56	194	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	16	<1	<50	<1	14	<1	24	<0.1	NA	2.4				
	50-55		10/28/10	0		25	9.13	13.2	6.11	67	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	49	<1	<50	<1	11	<1	12	<0.1	NA	0.6					
	60-65		10/26/10	1		25	NA	12.7	5.96	42	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	50	<1	<50	<1	23	<1	6	<0.1	NA	<0.5					
	70-75		10/26/10	0		25	NA	12.7	6.09	44	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	72	<1	<50	<1	6	<1	7	<0.1	NA	<0.5					
	80-85		10/26/10	10.9		25	NA	12.4	6.34	66	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5.9	4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	36	<1	<50	<1	11	<1	8	<0.1	NA	0.5				
	90-95		10/25/10	15.1		25	8.98	12.3	6.55	56	<0.5	3.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5.5	6.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	18	<1	<50	2	19	2	7	<0.1	NA	<0.5					
	100-105		10/25/10	5.5		25	2.55	12.2	6.75	52	<0.5	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.7	2.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.11	7	<1	<50	<1	55	<1	<5	<0.1	NA	<0.5					
	110-115		10/25/10	1.2		25	1.43	12	6.76	57	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	9	<1	<50	<1	8	<1	5	<0.1	NA	<0.5						

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk Profile Wells

[illegible]

* Indicates trace amounts present
NA- not analyze/ not available
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Speonk
Profile Wells

Well Information			Field Parameters								VOC's																								Metals							Inorganics				Coordinates				
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,P-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West		
SP-68	25-30	69 Drew Drive	4/8/10	0.6	2.2	25.28	5.52	12.4	4.71	196	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.22	218	<1	<50	7	921	5	16	<.1	NA	8	40.82347	-72.71235	
	35-40		4/8/10	1.1		25.28	7.35	12.6	4.9	154	<.5	1.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.25	229	<1	<50	3	573	2	21	<.1	NA	5.1					
	45-50		4/8/10	0		25.28	7.18	12.7	5.35	159	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.3	0.85	222	<1	<50	4	296	<1	18	<.1	NA	2.4					
	55-60		4/8/10	0		25.28	8.1	12.7	8.77	126	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.6	0.34	33	<1	<50	2	80	3	6	<.1	NA	0.9				
	65-70		4/8/10	0.5		25.28	8.38	12.6	6.56	48	<.5	<.5	<.5	0.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.22	27	<1	<50	<1	29	1	5	<.1	NA	0.9				
	75-80		4/8/10	0		25.28	1.00	12.6	7.09	69	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.81	586	<1	<50	<1	20	1	6	<.1	NA	<.5			
SP-69	25-30	Drew Drive	3/11/10	6.3	12.9	24.45	4.75	12	5.74	191	<.5	6.3	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	6.3	274	<1	<50	9	156	2	29	<.4	NA	6	40.82305	-72.71115	
	35-40		3/11/10	5.2		24.45	2.51	12.5	5.58	238	<.5	5.2	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.78	353	1	<50	5	744	2	12	<.1	NA	10.7				
	45-50		3/11/10	0.7		24.45	6.87	11.9	4.9	194	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.27	353	<1	<50	2	449	1	18	<.1	NA	5.5				
	55-60		3/11/10	0		24.45	7.42	11.6	5.61	153	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.23	122	<1	<50	1	6	<1	14	<.1	NA	2.1				
	65-70		3/11/10	0.7		24.45	6.19	11.5	5.81	106	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.27	15	<1	<50	2	33	1	7	<.1	NA	1.6				
	75-80		3/11/10	0		24.45	8.35	11.5	6.33	52	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.1	32	<1	<50	<1	<.5	<1	7	<.1	NA			1.2
SP - 69D	80-85	Drew Drive	12/6/10	66	95.7	24.9	4.36	12.6	6.96	66	4.7	13	<0.5	8.5	<0.5	<0.5	<0.5	<0.5	<0.5	33	0.8	6.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.	<0.5	<2.	<0.5	<0.5	0.97	298	1	<50	4	475	1	<250	<5	NA	<25	40.82312	-72.71172	
	90-95		12/6/10	29.7		24.9	4.01	12.4	6.93	64	2.6	11	<0.5	4.7	<0.5	<0.5	<0.5	<0.5	<0.5	8.3	<0.5	3.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.	<0.5	<2.	<0.5	<0.5	0.54	171	<1	<50	4	486	1	<250	<5	NA			<25
	100-105		12/2/10	0		24.9	0.30	14.9	7.1	72	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.	<0.5	<2.	<0.5	<0.5	1.36	518	3	<50	11	443	1	<500	<10	NA	<50			
	110-115		12/2/10	0		24.9	0.14	13.3	6.86	76	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.	<0.5	<2.	<0.5	<0.5	2.37	401	2	<50	15	2270	11	<500	<10	NA	<50			
	120-125		12/2/10	0		24.9	0.15	13.2	6.9	62	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.	<0.5	<2.	<0.5	<0.5	0.12	472	2	<50	3	243	<1	<30	<0.6	NA	<3			
	130-135		11/30/10	0		24.9	0.41	13.7	7.1	68	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.	<0.5	<2.	<0.5	<0.5	0.55	511	6	<50	1	59	<1	<50	< 1	NA	< 5			

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																						Metals							Inorganics				Coordinates																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,P-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
SP-70	25-30	Drew Drive	3/25/10	0	3.3	25.25	4.1	12.6	6.4	160	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.98	171	<1	<60	6	124	2	<20	<.4	NA	5.5	40.82248	-72.70998																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	35-40		3/25/10	1.3		25.25	5.96	12.8	5.55	145	<.5	1.3	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.63	89	<1	<60	6	40	<1	21	<.1	NA	2.6																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	45-50		3/25/10	1.5		25.25	5.6	12.8	5.22	219	<.5	1.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.2	159	<1	<60	3	614	2	20	<.1	NA	2.3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	55-60		3/25/10	0		25.25	7.55	12.8	5.7	136	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5			<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																						Metals							Inorganics				Coordinates																												
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,P-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West																								
SP-74	25-30	Montauk Highway, Speonk	3/16/10	0.7	30.1	20.25	7.71	11.4	7.8	64	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.19	73	<1	<50	5	385	<1	10	<.1	NA	<.5	40.82091	-72.71391																							
	35-40		3/11/10	1.7		20.5	4.94	11.9	5.81	249	<.5	1.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.54	229	<1	<50	2	363	2	25	<.3	NA	6.8																										
	45-50		3/11/10	0		20.5	6.45	11.9	5.8	188	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.62	254	<1	<50	2	379	2	22	<.3	NA	3.1																										
	55-60		3/11/10	0		20.5	4.69	11.9	6.38	183	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.43	161	<1	<50	1	20	1	16	<.3	NA	3.6																										
	65-70		3/11/10	0		20.5	6.63	11.8	6.6	92	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.22	36	<1	<50	1	24	<1	<15	<.3	NA	<1.5																									
	75-80		3/11/10	27.7		20.5	7.04	11.7	7.63	57	3.9	8.9	<.5	6.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.9	<.5	4.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.43	123	<1	<50	2	205	6	<20	<.4	NA	<2																									
SP-74D	90-95		11/18/10	1.1	1.1	21.7	1.38	13.1	6.62	69	<.5	1.1	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	40.82099	-72.71370																							
	100-105		11/18/10	0		21.7	1.52	16.9	6.52	66	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5																										
	110-115		11/18/10	0		21.7	1.26	13	7.02	71	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5																									
SP-75	25-30	Montauk Highway, Speonk	3/25/10	0	1.4	23.38	5.73	11.5	6.53	39	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	40.82071	-72.71347																					
	35-40		3/16/10	0.6		23.6	5.43	11.8	3.5	195	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5																							
	45-50		3/16/10	0.8		23.6	5.85	11.7	4.5	244	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5			<.5																				
	55-60		3/16/10	0		23.6	6.74	11.8	5.65	277	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5			<.5	<.5	<.5																		
	65-70		3/16/10	0		23.6	7.34	11.7	5.71	209	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5			<.5	<.5	<.5	<.5	<.5																
	75-80		3/16/10	0		23.6	7.56	11.7	6.41	66	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5			<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																				Metals								Inorganics				Coordinates							
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,P-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West		
SP-77	25-30	32 Drew Drive	4/21/10	0	8.4	24.37	2.90	11.8	6.72	218	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	7.92	2200	<1	<50	2	42	<1	20	<.1	0.4	11.8	40.82506	-72.70629	
	35-40		4/21/10	0		24.37	1.88	12.8	6.78	147	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	7.92	1130	<1	<50	3	216	6	17	<.1	0.12	1.3					
	45-50		4/21/10	0.6		24.37	4.1	12.7	6.89	100	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.97	773	<1	<50	1	25	1	21	<.1	0.05	0.7				
	55-60		4/21/10	0		24.37	7.69	12.8	7.26	43.2	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.68	353	<1	<50	<1	32	1	7	<.1	0.03	<.5				
	65-70		4/21/10	0		24.37	4.67	12.6	7.51	49.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.99	297	<1	<50	1	79	2	6	<.1	0.05	<.5				
	75-80		4/21/10	7.8		24.37	5.52	12.8	7.52	61.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.72	627	<1	67	<1	53	2	5	<.1	0.03	0.9			
SP-77D	90-95	32 Drew Drive	11/29/10	29.3	30.6	28	7.87	11.7	7.07	68	<0.5	5.3	<0.5	0.8	<0.5	<0.5	1.1	<0.5	<0.5	9.1	13	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<2.0	<0.5	<0.5	<0.1	370	<1	<50	<1	27	2	8	<0.1	NA	0.5	40.82506	-72.70634		
	100-105		11/29/10	1.3		28	0.93	12.2	7	65	<0.5	1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<2.0	<0.5	<0.5	0.19	965	<1	<50	<1	33	<1	<15	<0.3	NA	<1.5				
	110-115		11/29/10	0		28	0.15	11.6	6.97	64	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2.0	<0.5	<2.0	<0.5	<0.5	1.66	268	2	<50	<1	12	<1	6	<0.1	NA	<0.5				
SP-78	25-30	36 Drew Drive	4/22/10	0	1.9	23.63	2.67	12.7	6.61	143	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	7.72	730	<1	<50	<1	6	<1	12	<.1	NA	1.1	40.82434	-72.70621	
	35-40		4/22/10	0		23.63	1.87	13.2	6.78	64.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	7.27	734	<1	<50	2	155	6	<10	<.2	0.03	<1				
	45-50		4/22/10	0		23.63	2.05	13	6.63	206	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	12	701	<1	<50	5	274	19	22	<.3	0.16	1.9				
	55-60		4/22/10	0		23.63	5.04	12.6	6.72	108	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.21	297	<1	<50	4	183	10	13	<.2	0.07	1.8				
	65-70		4/22/10	0.8		23.63	4.94	12.7	7.06	49.9	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.51	375	<1	<50	1	109	4	<20	<.4	<.02	<2				
	75-80		4/22/10	1.1		23.63	6.63	12.8	7.28	80.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.62	939	<1	<50	3	175	11	16	<.3	0.03	<1.5			
SP-79	25-30	40 Drew Drive	5/5/10	0	0	23.25	4.94	11.7	5.42	216	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.18	193	<1	81	6	56	<1	22	<.3	NA	5.4	40.82358	-72.70646
	35-40		5/5/10	0		23.25	6.59	12.5	4.95	73	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.47	164	<1	67	4	300	1	9	<.1	NA	<.5			
	45-50		5/5/10	0		23.25	4.25	12.5	4.88	191	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.86	112	<1	<50	5	447	3	17	<.1	NA	5.3				
	55-60		5/5/10	0		23.25	5.51	12.7	5.38	144	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.29	41	<1	<50	1	38	2	13	<.1	NA	4.8				
	65-70		5/5/10	0		23.25	6.75	12.5	5.5	173	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.9	0.55	33	<1	<50	2	89	2	6	<.1	NA	6.2			
	75-80		5/5/10	0		23.25	5.32	12.3	6.09	100	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.36	121	<1	<50	2	110	4	<15	<.3	NA	2.7			
SP-80	25-30	44 Drew Drive	5/6/10	0	0.5	22.74	5.02	12.1	5.52	455	<.5/																																							

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																				Metals							Inorganics				Coordinates								
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,p-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West		
SP-82	25-30	7 Private Road, Eastport	7/29/10	0	85.3	23.5	5.38	12.8	6.6	121	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.41	304	<1	<50	4	102	7	<20	<.4	NA	4.1	40.81890	-72.71575	
	35-40		7/29/10	0		23.5	3.45	12.8	6.9	334	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.88	551	<1	<50	3	44	2	11	<.1	NA	2.4					
	45-50		7/29/10	2		23.5	3.54	12.6	6.94	205	<.5	2	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	5.78	632	<1	<50	4	54	2	17	<.1	NA	3.9						
	55-60		7/29/10	0.7		23.48	5.1	12.5	6.74	314	<.5	0.7	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.05	267	<1	<50	2	21	3	10	<.1	NA	4.5					
	65-70		7/29/10	0.8		23.5	6.65	12.3	6.97	114	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.6	165	<1	<50	2	41	5	<15	<.3	NA	<1.5				
	75-80		7/29/10	81.8		23.45	6.86	12.1	6.68	59	9.2	59	<.5	2.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	8.7	0.9	1.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.16	255	<1	<50	<1	14	<1	<5	<.1	NA	<.5				
SP-83	25-30	15 Dock Road, Eastport	8/2/10	0	5.9	22.45	3.70	14.4	7.09	188	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.09	357	<1	<50	2	10	1	<50	<1	NA	<.5	40.81775	-72.71542
	35-40		8/2/10	0		22.45	2.13	14.3	7.14	235	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.84	313	<1	<50	1	7	<1	12	<.1	NA	3.8			
	45-50		8/2/10	0.5		22.45	3.28	14.2	6.8	170	<.5	0.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.57	474	<1	<50	4	313	1	9	<.1	NA	3.8			
	55-60		8/2/10	0.8		22.45	3.74	13.9	7.25	186	<.5	0.8	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.85	139	<1	<50	2	6	<1	12	<.1	NA	5.6			
	65-70		8/2/10	0		22.45	5.17	13.6	7.08	130	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.58	199	<1	<50	1	8	<1	16	<.3	NA	3.3			
	75-80		8/2/10	0.5		22.45	5.15	13.2	7.21	165	<.5	0.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.25	482	<1	<50	2	30	2	<50	<1	NA	<.5			
	85-90		8/2/10	4.1		22.45	6.97	13	6.88	57	2.7	0.5	<.5	0.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.2	557	<1	<50	<1	31	1	<50	<1	NA	<.5			
	SP-84		25-30	17 Dock Road, Eastport	8/2/10	0	0.6	20.1	5.36	12.5	6.69	148	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.78	200	<1	<50	1	19	1	<5	<.1		
35-40		8/2/10	0			20.1	4.03	12.6	6.62	309	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.08	229	<1	<50	3	12	1	<30	<.6	NA	12.8				
45-50		8/2/10	0			20.1	5.74	12.6	6.6	147	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.39	321	<1	<50	3	71	<1	<30	<.6	NA	<3				
55-60		8/2/10	0			20.1	6.98	12.6	6.65	232	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.43	174	<1	<50	2	<5	<1	<30	<.6	NA	<3				
65-70		8/2/10	0.6			20.1	6.46	12.6	6.7	144	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.31	190	<1	<50	3	45	3	<50	<1	NA	<.5				
75-80		8/2/10	0			19.88	8.19	12.6	7.3	123	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.7	412	<1	<50	2	44	4	<20	<.4	NA	2.8			

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																				Metals							Inorganics				Coordinates									
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,2,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,P-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West			
SP-85	25-30	27 Dock Road, Eastport	8/3/10	0	0	23.5	4.34	13.1	5.67	97	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.14	226	<1	<50	4	33	<1	<15	<.3	NA	<1.5	40.81734	-72.71825	
	35-40		8/3/10	0		23.5	3.02	12.9	5.9	173	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	6.48	425	<1	<50	3	36	<1	26	<.3	NA	3.8					
	45-50		8/3/10	0		23.5	3.89	12.9	6.85	257	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.34	441	<1	<50	3	125	<1	21	<.3	NA	4.3					
	55-60		8/3/10	0		23.5	3.68	13	4.62	197	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.5	4.79	269	<1	<50	3	77	2	<15	<.3	NA	2.8				
	65-70		8/3/10	0		23.5	3.09	12.9	4.58	249	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	4.18	252	<1	<50	3	29	3	<15	<.3	NA	5.3				
	75-80		8/3/10	0		23.5	4.76	12.7	5.17	182	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.9	2.18	867	<1	<50	2	12	2	<15	<.3	NA	3.8			
SP-86	15-20	31 Dock Road, Eastport	8/4/10	0	1.5	18.9	1.63	15.2	7.25	454	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.71	134	<1	<50	7	67	<1	10	<.1	NA	1.3	40.81726	-72.72025	
	25-30		8/4/10	0		18.9	4.05	14	7.12	126	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.95	296	<1	<50	4	22	<1	11	<.1	NA	4.1				
	35-40		8/4/10	0		18.9	1.82	13.9	7.17	197	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	3.07	186	<1	<50	<1	7	<1	12	<.1	NA	3.7				
	45-50		8/4/10	0		18.9	3.56	14	7.24	227	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.59	254	<1	<50	2	14	<1	19	<.1	NA	8.8				
	55-60		8/4/10	0		18.9	4.06	13.9	7.23	238	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.08	75	<1	<50	2	<5	<1	9	<.1	NA	9.3				
	65-70		8/4/10	0.9		18.9	3.81	13.9	6.86	155	<.5	0.9	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.25	766	<1	<50	1	5	<1	9	<.1	NA	2.9				
	75-80		8/4/10	0.6		18.9	6.18	13.7	6.62	141	<.5	0.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.11	509	<1	<50	<1	<5	<1	10	<.1	NA	3.7				
SP-87	5-10	Dock Road, Eastport	8/9/10	0	8.4	7.65	1.66	21.2	6.77	170	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	2.29	66	<1	<50	3	544	1	<50	<1	NA	<5	40.81709	-72.72150
	15-20		8/9/10	2.3		7.65	3.12	16.5	6.75	239	<.5	2.3	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1.8	72	<1	<50	4	12	<1	36	<.1	NA	5.8				
	25-30		8/9/10	5.6		7.65	0.23	14.4	6.24	305	<.5	5.6	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	6.93	475	<1	<50	1	70	1	<30	<.6	NA	8.2					
	35-40		8/9/10	0.5		7.65	4.45	13.9	6.2	263	<.5	0.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	1	2.91	230	<1	<50	2	14	1	25	<.4	NA	2.1				
	45-50		8/9/10	0		7.65	5.89	13.8	5.97	293	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.91	243	<1	<50	<1	16	1	<20	<.4	NA	<2				
	55-60		8/5/10	0		7.65	3.47	15	6.15	466	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	0.29	194	<1	<50	<1	7	<1	23	<.3	NA	<1.5				
	65-70		8/5/10	0		7.65	0.1	17.1	6	35	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	30	13400	51	<50	10	23	<1	2170	<10	NA	<50				
	75-80		8/5/10	0		7.65	0.07	16.9	5.8	36	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	<.5	52.4	7030	56	<50	11	30	1	2080	<2	NA	<10				
SP-88	50-55	Montauk Highway, Speonk	11/17/10	0.8	64.3	27.1	6.01	13.4	5.72	174	<0.5	0.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	256	<1	<50	<1	19	<1	13	<0.1	NA	3.9	40.82009	-72.71243	
	60-65		11/17/10	0.6		27.1	5.96	13.4	6.13	143	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<																						

Speonk
Profile Wells

Well Information			Field Parameters								VOC's																						Metals							Inorganics				Coordinates						
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Chlorinated Voc total/ screen	Chlorinated Voc total/ well	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	Tetrachloroethene	Trichloroethene	1,1-Dichloroethene	Freon 113	m,p-Dichlorobenzene	1,2-Dichlorobenzene (o)	Benzene	Toluene	Dimethyldisulfide	Chlorobenzene	Total Xylene	n-Propane	tert-Amyl-Methyl-Ether	n-Butane	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Ammonia mg/L	Nitrate mg/L	North	West		
SP-89	20-25	Jessie Road	11/30/10	0	26.9	15.2	2.02	15.8	7.12	96	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<2	<0.5	0.9	1.17	565	<1	79	<1	72	<1	<15	<0.3	NA	2.4	40.82182	-72.70640
	30-35		11/30/10	0		15.2	1.35	14.2	7.1	59	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	512	<1	<50	<1	156	<1	7	<0.1	NA	<0.5				
	40-45		11/30/10	0		15.2	4.17	13.3	7.07	178	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	463	<1	<50	<1	117	<1	17	<0.1	NA	5.5					
	50-55		11/29/10	0		15.2	3.94	13.1	7.31	216	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	596	<1	<50	<1	14	<1	11	<0.1	NA	7.5					
	60-65		11/29/10	0		15.2	5.60	12.9	7.26	137	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	324	<1	<50	<1	6	<1	8	<0.1	NA	1.7					
	70-75		11/29/10	0.7		15.2	6.97	13	7.16	53	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	239	<1	<50	<1	17	<1	8	<0.1	NA	<0.5					
	80-85		11/29/10	0		15.2	5.62	12.8	7.14	48	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.19	237	<1	<50	<1	34	<1	<30	<0.6	NA	<3.0					
	90-95		11/29/10	25		15.2	6.66	13.1	7.01	63	3.5	21	<0.5	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.19	120	<1	<50	<1	55	<1	<30	<0.6	NA	<3.0					
	100-105		11/29/10	1.2		15.2	4.79	12.8	6.78	57	<0.5	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	10.1	151	5	<50	4	5400	17	<250	<5.0	NA	<25					
	110-115		11/29/10	0		15.2	0.39	12.8	7.02	66	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	1.27	298	2	<50	2	340	1	<500	<10.	NA	<50					
SP-90	30-35	9 Private Road, Speonk	11/22/10	0	197.6	22.05	4.98	14.1	5.56	192	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.2	1160	1	<50	1	79	<1	<20	<0.4	NA	4.2	40.49056	-72.42910			
	40-45		11/22/10	1.5		22.05	4.69	13.6	5.62	225	<0.5	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.27	1210	2	<50	<1	42	<1	17	<0.3	NA	3.4						
	50-55		11/22/10	1.7		22.05	4.78	13.5	6.12	202	<0.5	1.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.2	901	2	<50	<1	69	<1	<20	<0.4	NA	2.6							
	60-65		11/22/10	40.2		22.05	5.77	13.4	6.07	97	5	26	<0.5	1.8	<0.5	<0.5	<0.5	<0.5	<0.5	5.7	0.7	1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.53	246	1	<50	1	188	1	<500	<10	NA	<50						
	70-75		11/22/10	152.8		22.05	4.65	13.3	6.56	84	11	109	<0.5	8.2	<0.5	<0.5	<0.5	<0.5	<0.5	18	2.2	4.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	2.39	274	3	<50	5	943	5	<1000	<20	NA	<100						
	80-85		11/22/10	1.4		22.05	0.74	13.2	6.73	72	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	P	P	P	P	P	P	P	<1000	<20	NA	<100							
	90-95		11/22/10	0		22.05	0.68	13.1	6.84	74	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	P	P	P	P	P	P	P	<500	<10	NA	<50							
	100-105		11/22/10	0		22.05	1.20	13.1	6.99	77	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	P	P	P	P	P	P	P	<250	<5	NA	<25							
SP-91	20-25	9 Private Road, Speonk	11/24/10	0	6.7	16.45	5.39	13.5	5.97	93	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.32	718	<1	<50	2	130	2	<50	<1	NA	<5	40.82099	-72.71370				
	30-35		11/24/10	0		16.45	5.22	12.8	5.65	254	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	743	<1	<50	<1	52	<1	<50	<1	NA	<5						
	40-45		11/24/10	0		16.45	4.87	12.3	5.64	267	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	<0.1	713	<1	<50	<1	26	<1	<50	<1	NA	<5							
	50-55		11/24/10	0		16.45	5.67	12.3	5.56	247	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<2	<0.5	<0.5	0.1	442	<1	<50	<1	59	<1	<50	<1									

Speonk Profile Wells

[illegible]

* Indicates trace amounts present
NA- not analyze/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Permanent Wells

Well Information			Field Parameters							VOC'S																				Metals							Inorganics			Coordinates							
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Total Chlorinated VOC's	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2- Tetrachloroethane	1,1,1,2- Tetrachloroethane		Tetrachloroethene	Trichloroethene	1,1-Dichloroethene		1,3- Dichlorobenzene (m)	Benzene	Total Xylene	1,2-Dichloroethane	Carbon tetrachloride	tert-Amyl-Methyl-Ether	Freon 113	m,P-Dichlorobenzene	1,2- Dichlorobenzene (o)	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Nitrate mg/L	North	West
SP-1M	25-35	E. Dead End Circle Place	8/19/08	0	23.46	5.9	18	5.7	134	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	8	<1	<50	6	41	<1	9	<1	3.5	40.82724	-72.70163		
			1/26/09	0	22.47	7.6	10	6.6	129	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	3	<1	<50	3	20	1	7	<1	0.7	40.82724	-72.70163		
SP-1	70-75	E. Dead End Circle Place	8/19/08	67.9	23.57	10	14	6.1	80	0.6	2.1	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		57	8.2	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	11	<1	<50	<1	7	2	11	<1	1	40.82724	-72.70163	
			1/26/09	44.8	22.72	8.8	11	6.4	890	<0.5	1.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		39	4.3	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.7	28	<1	<50	3	538	13	12	<1	1	40.82724	-72.70163	
			11/16/10	46	23.8	6.1	13	6.9	77	<0.5	1.5	<0.5		0.6	<0.5	<0.5	<0.5	<0.5	<0.5		38	5.9	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<1	<1	<50	<1	<5	<1	9	<1	1.3	40.82724	-72.70163	
			9/22/11	0	23.55	6.3	19	6.8	210	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.4	91	<1	52	6	412	8	<50	<1	<5	40.82724	-72.70163	
SP-5M	25-35	N. Dead End Circle Place	8/18/08	0.8	26.68	4.4	13	4.2	228	<0.5	0.8	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	341	<1	59	10	2150	<1	31	<1	6.9	40.82814	-72.70126	
			1/26/09	0	25.66	4.2	12	4.6	216	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	148	<1	<50	7	1550	<1	21	<1	7.2	40.82814	-72.70126	
SP-5	70-75	N. Dead End Circle Place	8/18/08	81.4	26.75	8.8	14	5.4	61	<0.5	1.7	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		74	5.7	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	130	<2	<50	<1	7	<1	10	<1	0.7	40.82814	-72.70126	
			1/26/09	73.2	25.74	6.8	12	5	64	<0.5	1.7	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		66	5.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	23	<1	<50	<1	18	1	9	<1	0.8	40.82814	-72.70126	
			11/16/10	95.8	26.8	6.1	13	7.1	62	<0.5	0.8	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		90	5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	1.6	<1	<50	<1	29	<1	9	<1	1.3	40.82814	-72.70126	
			9/22/11	90.2	26.04	7.7	15	6.8	62	<0.5	0.8	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		85	4.4	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	5	<1	<50	5	50	<1	9	<1	1.2	40.82814	-72.70126	
SP-5B	140-145	N. Dead End Circle	8/18/08	0.8	26.43	2.7	17	6.8	75	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		0.8	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	130	<2	<50	1	388	4	p	p	p	40.82814	-72.70126	
-16	75-80	Vivia Drive	1/17/08	1325	22.99	6.1	12	5.7	101	110	627	<0.5		25	1	<0.5	0.7	<0.5	<0.5		351	196	14		<0.5	<0.5	<0.5	0.7	110	<0.5	12	<0.5	<0.5	0.9	<0.5	0.2	56	<2	<50	<1	41	1	6	<1	0.9	40.81922	-72.70278
			7/8/08	382.1	22.41	6.6	13	9.4	79	21	131	<0.5		6.5	<0.5	<0.5	<0.5	<0.5	<0.5		162	58	3.6		<0.5	<0.5	<0.5	<0.5	21	<0.5	1.8	<0.5	<0.5	<0.5	<0.5	0.3	19	<2	<50	1	46	1	7	<1	1	40.81922	-72.70278
			1/27/09	320.3	21.45	6.8	12	6	59	17	111	<0.5		5.5	<0.5	<0.5	<0.5	<0.5	<0.5		157	27	2.8		<0.5	<0.5	<0.5	<0.5	17	<0.5	1	<0.5	<0.5	<0.5	<0.5	<0.1	4	<1	<50	<1	9	<1	7	<1	1	40.81922	-72.70278

* Indicates trace amounts present
NA- not analyzed/ not available
P- pending lab results
All quantities are in ppb unless otherwise specified

Speonk
Permanent Wells

Well Information			Field Parameters							VOC'S																	Metals							Inorganics			Coordinates											
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Total Chlorinated VOC's	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2- Tetrachloroethane	1,1,1,2- Tetrachloroethane		Tetrachloroethene	Trichloroethene	1,1-Dichloroethene		1,3- Dichlorobenzene (m)	Benzene	Total Xylene	1,2-Dichloroethane	Carbon tetrachloride	tert-Amyl-Methyl-Ether	Freon 113	m,P-Dichlorobenzene	1,2- Dichlorobenzene (o)	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Nitrate mg/L	North	West	
SP-18	75-80	Wisteria	11/18/10	138.8	22.85	2	13	6.5	207	11	36	<0.5		1.8	<0.5	<0.5	<0.5	<0.5	<0.5		68	21	1		<0.5	<0.5	<0.5	<0.5	11	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	8	<1	<50	<1	12	<1	10	<1	7.1	40.81922	-72.70278
			9/14/11	58.4	21.34	2.2	20	6.8	238	3.8	18	<0.5		0.7	<0.5	<0.5	<0.5	<0.5	<0.5		26	9.9	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	14	<1	<50	<1	12	1	<5	<1	2	40.81922	-72.70278			
			12/19/12	5.2	23.11	0.6	11	5.4	247	<0.5	1.1	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		3	1.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	18	<1	5.2	40.81922	-72.70278					
SP-18	75-80	215 Montauk Hwy	1/17/08	848	24.22	4	12	6.5	94	59	407	1		21	<0.5	<0.5	3	<0.5	<0.5		186	159	12		<0.5	<0.5	<0.5	3	59	<0.5	9.5	<0.5	<0.5	0.8	<0.5	2.5	522	<2	<50	4	481	12	7	<1	1.1	40.81920	-72.70210	
			7/8/08	234	23.79	5.9	13	7.8	71	14	102	<0.5		5.2	<0.5	<0.5	<0.5	<0.5	<0.5		67	43	2.8		<0.5	<0.5	<0.5	<0.5	14	<0.5	1.6	<0.5	<0.5	<0.5	<0.5	0.2	144	<2	<50	<1	19	<1	6	<1	0.4	40.8192	-72.7021	
			1/27/09	493.3	22.85	6.8	12	6.1	76	26	172	<0.5		5.9	<0.5	<0.5	<0.5	<0.5	<0.5		229	58	2.4		<0.5	<0.5	<0.5	<0.5	26	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	<0.1	1	<1	<50	<1	<5	<1	7	<1	0.7	40.8192	-72.7021	
			3/4/10	153.3	24.5	5.9	13	5.7	176	7.1	19	<0.5		1.4	<0.5	<0.5	<0.5	<0.5	<0.5		106	19	0.8		<0.5	<0.5	<0.5	<0.5	7.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<1	<1	<50	<1	<5	<1	10	<0.1	2.5	40.8192	-72.7021		
			11/18/10	98.9	24.2	5	13	6.7	118	5.8	17	<0.5		1.3	<0.5	<0.5	<0.5	<0.5	<0.5		60	14	0.8		<0.5	<0.5	<0.5	<0.5	5.8	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	2	<1	<50	<1	6	<1	2.1	40.8192	-72.7021				
			9/14/11	45.8	22.68	5.8	24	7	75	2.1	6.7	<.05		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		30	7	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<50	<1	<5	<1	6	<1	1.2	40.8192	-72.7021			
			12/19/12	155.8	24.58	0.9	13	6	69	13	32	<.05		1.7	<.05	<.05	<.05	<.05	<.05		80	28	1.1		<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	<.05	P	P	P	P	P	P	6	<1	1.1	40.8192	-72.7021			
SP-18S	25-30	215 Montauk Hwy	3/24/10	0	21.6	0.9	14	6	111	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<1	<1	<50	<1	<5	<1	6	<0.1	<0.5	40.81918	-72.70205		
SP-21S	25-30	Montauk Hwy	3/24/10	0	19.86	6.3	12	5.2	278	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	78	<1	<50	3	91	<1	33	<0.3	7.1	40.81904	-72.70024		
SP-22	75-80	Montauk Hwy	1/17/08	454	22.76	5.1	11	5.9	93	31	173	<1		23	<1	<1	<1	<0.5	<0.5		89	127	11		<0.5	<0.5	<0.5	<1	31	<1	<1	<1	<0.5	<1	<1	1.1	122	<2	<50	2	176	8	7	<1	2.6	40.81902	-72.69951	
		Wisteria	3/18/09	541.3	22.2	3	12	6.2	70	38	191	<0.5		27	16	<0.5	1.3	<0.5	<0.5		120	148	<0.5		<0.5	<0.5	<0.5	1.3	38	<0.5	2.2	<0.5	<0.5	0.7	<0.5	0.4	536	<1	<50	<1	43	<1	8	<0.1	0.6	40.81899	-72.69952	

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Speonk
Permanent Wells

Well Information			Field Parameters							VOC'S																				Metals							Inorganics			Coordinates								
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Total Chlorinated VOC's	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2- Tetrachloroethane	1,1,1,2- Tetrachloroethane		Tetrachloroethene	Trichloroethene	1,1-Dichloroethene		1,3- Dichlorobenzene (m)	Benzene	Total Xylene	1,2-Dichloroethane	Carbon tetrachloride	tert-Amyl-Methyl-Ether	Freon 113	m,p-Dichlorobenzene	1,2- Dichlorobenzene (o)	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Nitrate mg/L	North	West	
SP-22P	75-80	Montauk Highway	3/4/10	365.6	23.1	4.7	12	6.5	110	34	148	<0.5		24	<0.5	<0.5	1	<0.5	<0.5		74	78	6.6		<0.5	<0.5	<0.5	1	34	<0.5	1.8	<0.5	<0.5	0.6	<0.5	0.1	4	<1	<50	<1	35	2	<5	<0.1	3.5	40.81899	-72.69952	
			11/22/10	826.7	23	3.3	13	6.2	68	61	209	<0.5		39	<0.5	<0.5	1.7	<0.5	<0.5		194	322	<0.5		<0.5	<0.5	<0.5	1.7	61	<0.5	<0.5	<0.5	<0.5	1	<0.5	<0.1	1	<1	<50	<1	8	<1	<5	<1	1.3	40.81899	-72.69952	
SP-22S	25-30	Montauk Highway	3/24/10	0	20.6	8.3	9.9	6.4	990	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	4	2	<50	<1	<5	2	<15	<0.3	<1.5	40.81899	-72.69952			
SP-23	95-100	Wisteria Drive	1/17/08	973	20.61	6.5	12	6.1	64	89	658	<1		22	<1	<1	<1	<0.5	<0.5		68	126	10		<0.5	<0.5	<0.5	<1	89	<1	21	<1	<0.5	<1	<1	2	176	<2	<50	4	438	19	6	<1	0.6	40.81788	-72.70310	
SP-23P	85-90	Wisteria Drive	1/27/09	846	19.1	7.3	12	6.5	63	87	581	<0.5		20	0.6	<0.5	0.6	<0.5	<0.5	<0.5		62	87	7.8		<0.5	<0.5	<0.5	0.6	87	<0.5	17	<0.5	<0.5	0.8	<0.5	1.2	46	<1	<50	2	110	8	5	<1	0.8	40.81788	-72.70307
			11/18/10	762.3	20.5	5.6	14	6.8	60	82	471	<0.5		18	0.5	<0.5	<0.5	<0.5	<0.5	<0.5		77	104	9.8		<0.5	<0.5	<0.5	<0.5	82	<0.5	20	<0.5	<0.5	0.7	<0.5	0.5	21	<1	<50	5	60	5	<20	<4	<2	40.81788	-72.70307
			9/14/11	508.7	18.94	7	17	7.3	58	55	321	<0.5		9.2	6.5	<0.5	<0.5	<0.5	<0.5	<0.5		52	65	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	10	<1	<50	<1	5	2	7	<1	<5	40.81788	-72.70307			
SP- 26P	75-80	34 Nidzyn Ave	3/16/09	8.6	21.25	5.7	12	5.7	180	<0.5	7.9	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	0.7	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	1280	<1	<50	3	10	<1	15	<0.1	2.4	40.81430	-72.70053		
			11/24/10	3.2	22.82	4.9	13	6.4	204	<0.5	2.6	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	0.6	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	953	<1	<50	<1	20	<1	14	<1	2.1	40.8143	-72.70053			
			7/13/11	9.4	21.09	na	na	6.3	205	0.5	6.9	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		0.6	1.4	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	<1	839	<1	76	<1	58	1	15	<1	2.2	40.8143	-72.70053		
			12/26/12	9.5	21.69	0.8	12	5.4	216	0.5	4.4	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		1.5	3.1	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	11	<1	2.4	40.8143	-72.70053			
SP-34D	110-115	Garland Street at the fork in the wooded area	8/21/08	33.6	22	6	13	6.8	85	4.4	25	<0.5		1.8	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	1.3	1.1		<0.5	<0.5	<0.5	<0.5	4.4	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	53	<2	<50	<1	53	1	5	<1	0.9	40.81633	-72.70210
			1/27/09	21	21.5	7.3	14	6.2	189	2.3	13	<0.5		0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2	57	<1	<50	<1	130	2	6	<1	2.6	40.81633	-72.70210		
			11/22/10	128.2	22.4	4.2	14	7.2	157	16	89	<0.5		6.7	<0.5	<0.5	0.5	<0.5	<0.5	<0.5		1	15	<0.5		<0.5	<0.5	<0.5	0.5	16	<0.5	4.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	11	<1	<50	<1	14	<1	5	<1	3.3	40.816333
SP-34P	70-75		3/16/09	0.7	21.88	4.9	12	6.9	125	<0.5	0.7	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.8	972	<1	<50	3	62	4	20	<0.1	2.8	40.81633	-72.70214		
			11/22/10	0.6	22.6	2.6	14	6.4	247	<0.5	0.6	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	33	<1	<50	<1	9	<1	24	<1	4.5	40.81633	-72.70214	

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Speonk
Permanent Wells

Well Information			Field Parameters							VOC'S															Metals							Inorganics			Coordinates													
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Total Chlorinated VOC's	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2- Tetrachloroethane	1,1,1,2- Tetrachloroethane		Tetrachloroethene	Trichloroethene	1,1-Dichloroethene		1,3- Dichlorobenzene (m)	Benzene	Total Xylene	1,2-Dichloroethane	Carbon tetrachloride	tert-Amyl-Methyl-Ether	Freon 113	m,P-Dichlorobenzene	1,2- Dichlorobenzene (o)	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Nitrate mg/L	North	West	
SP-35	25-30	Matthews Drive	3/4/10	4.9	21.15	7.1	12	6.5	143	<0.5	4.9	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	<1	<1	<50	<1	13	2	7	<0.1	2.1	40.81784	-72.69987		
SP-35P	75-80	Matthews Drive	3/16/09	6.7	22.05	6.5	12	6.9	163	<0.5	1.7	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		2.3	2.7	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	736	<1	<50	1	58	2	8	<0.1	1.4	40.81788	-72.69973
			3/4/10	52.9	21.15	6.9	12	5.9	121	2.2	21	<0.5		1.8	<0.5	<0.5	<0.5	<0.5	<0.5		9.7	17	1.2		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	3	<1	<50	<1	<5	<1	6	<0.1	1.4	40.81788	-72.69973		
			11/23/10	6.8	22.8	4.8	13	6.7	156	<0.5	1.6	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		2.5	2.7	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	14	<1	<50	<1	<5	<1	<30	<0.6	3.8	40.81788	-72.69973			
			9/15/11	8	21.64	6.5	20	6.9	115	<0.5	2.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		2.2	3.3	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.4	35	<1	<50	<1	<5	<1	<250	<5	<25	40.81788	-72.69973			
			1/8/13	14.6	22.84	0.7	12	5.6	52	<0.5	1.1	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		7.9	5.6	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	P	<100	<2	<10	40.81788	-72.69973			
SP-40	15-20	Bridle Path, Speonk	8/1/12	0.8	7.71	4.5	19	6.2	217	<0.5	0.8	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.1	5	<1	<50	1	42	NR	20	<.4	2.5	40.81127	-72.69855		
SP- 44P	65-70	41 Matthews Drive	3/16/09	0.6	18	3.5	12	6	300	<0.5	0.6	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.9	329	<1	<50	4	122	3	22	<0.1	4.7	40.81318	-72.70308	
			11/24/10	1	18.5	3.2	13	6.3	274	<0.5	1	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	12	<1	<50	<1	81	<1	22	<.1	4.9	40.813183	-72.70308		
			9/29/11	4.9	17.56	2.4	16	6.6	278	<0.5	4.9	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5.3	543	<1	<50	4	99	8	21	<.3	3.8	40.813183	-72.70308			
			1/8/13	21	18.76	0.6	13	4.8	217	1.9	17	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	2.1	<0.5		<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	P	19	<.1	4	40.813183	-72.70308			
SP-45	25-30	Wisteria Drive, Speonk	8/1/12	0	17.79	7.4	16	5.9	128	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	5	<1	<50	1	17	2	<20	<.4	<2	40.814383	-72.70492			
-48	110-	Path, In Front of House #41	8/20/08	0	18.9	6.7	13	6.5	91	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	6	6	<2	<50	<1	6	1	13	<.1	0.7	40.81558	-72.69795		

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Speonk
Permanent Wells

Well Information			Field Parameters							VOC'S																	Metals							Inorganics			Coordinates												
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Total Chlorinated VOC's	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2- Tetrachloroethane	1,1,1,2- Tetrachloroethane		Tetrachloroethene	Trichloroethene	1,1-Dichloroethene		1,3- Dichlorobenzene (m)	Benzene	Total Xylene	1,2-Dichloroethane	Carbon tetrachloride	tert-Amyl-Methyl-Ether	Freon 113	m,P-Dichlorobenzene	1,2- Dichlorobenzene (o)	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Nitrate mg/L	North	West		
SP-115	115	Bridle Speonk of houl	1/29/08	0.6	18.1	8	13	6.7	84	<0.5	0.6	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	8	<1	<50	<1	<5	2	13	<1	0.4	40.81558	-72.69795			
SP-48	110-115	41 Bridle Path	1/9/13	22.6	19.19	0.6	13	6.1	96	<0.5	21	<0.5		0.9	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	0.7		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	P	14	<1	<5	40.81558	-72.69795			
SP-48P	70-75	41 Bridle Path	3/16/09	0.7	19	6.5	12	5.9	207	<0.5	0.7	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1	0.3	191	<1	<50	2	22	<1	18	<0.1	1.3	40.81566	-72.69808				
			1/9/13	0	19.39	0.8	13	5.2	285	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	P	13	<0.1	1.8	40.81566	-72.69808				
SP-49 MA	17-27	21 Nidzyn Avenue	1/21/09	0	20.85	9.2	14	5.9	113	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	15	<1	<50	<1	87	1	9	<1	1.3	40.81603	-72.69979			
			7/13/11	0	22.69	na	na	6.6	103	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.2	13	<1	<50	<1	191	<1	7	<1	1.9	40.81603	-72.69979				
			1/8/13	0	21.08	0.6	13	5.7	100	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	P	8	<1	1.9	40.81603	-72.69979				
SP-49 M	70-75	21 Nidzyn Avenue	1/21/09	6.3	21.05	8.9	13	6.1	88	<0.5	6.3	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	5	<1	<50	<1	5	1	9	<1	0.7	40.81603	-72.69979		
			11/23/10	0.8	22.26	6.6	14	6.6	335	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	0.8	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	11	<1	<50	<1	30	<1	21	<1	1.1	40.81603	-72.69979		
			9/21/11	1.3	21.02	8.2	17	6.9	227	<0.5	0.8	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	13	<1	<50	<1	18	1	22	<1	1.2	40.81603	-72.69979				
			1/8/13	0.8	21.83	0.7	13	5.4	175	<0.5	0.8	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	P	24	<1	<5	40.81603	-72.69979				
SP- 50MA	25-35	109 North Phillips Avenue	1/21/09	1.6	26.4	7.6	13	5	206	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		1.6	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	74	<1	<50	<1	642	1	16	<1	2.9	40.82573	-72.70042		
SP- 50M	75-80	109 North Phillips Avenue	1/21/09	359.7	26.45	6.7	12	6.1	53	1.5	39	<0.5		3.1	<0.5	<0.5	0.7	<0.5	<0.5		255	59	1.4		<0.5	<0.5	<0.5	0.7	1.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	2	<1	<50	<1	6	1	7	<1	0.2	40.82573	-72.70042	
			11/17/10	238.5	27.62	6.2	13	7.1	51	0.7	14	<0.5		1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		200	22	0.6		<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	2	<1	<50	<1	<5	<1	6	<1	<5	40.82573	-72.70042
			9/28/11	198.9	27.64	8.8	14	7.5	50	0.9	24	<0.5		2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		151	20	1		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	8	<1	<50	<1	15	1	6	<1	<5	40.82573	-72.70042		

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Speonk
Permanent Wells

Well Information			Field Parameters							VOC'S																				Metals							Inorganics			Coordinates							
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Total Chlorinated VOC's	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2- Tetrachloroethane	1,1,1,2- Tetrachloroethane		Tetrachloroethene	Trichloroethene	1,1-Dichloroethene		1,3- Dichlorobenzene (m)	Benzene	Total Xylene	1,2-Dichloroethane	Carbon tetrachloride	tert-Amyl-Methyl-Ether	Freon 113	m,P-Dichlorobenzene	1,2- Dichlorobenzene (o)	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Nitrate mg/L	North	West
SP-51MA	21-31	North Phillips Avenue	1/21/09	4.7	25.6	8.7	13	6.2	194	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		4.2	0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	46	<1	55	4	107	2	10	<1	2.2	40.82481	-72.70124	
			11/17/10	0	27	6.9	14	7	111	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	P	P	P	40.82481	-72.70124				
			9/29/11	0	25.76	9.3	17	6.7	280	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	7	<1	<50	2	24	2	8	<1	1	40.82481	-72.70124		
			1/30/13		27.32	0.8	13	6.8	164	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	<20	<4	4.9	40.82481	-72.70124			
SP- 51M	75-80	North Phillips Avenue	1/21/09	1420	25.8	2.2	12	6.2	78	7.9	26	<0.5		8.4	0.6	<0.5	0.6	1.8	1.8		1010	360	3.2		1.1	0.6	0.6	0.6	7.9	<0.5	<0.5	<0.5	0.8	2.7	<0.5	<1	16	<1	<50	3	<5	<1	9	<1	1.6	40.82481	-72.70124
			11/17/10	1035	27	2.8	13	6.8	73	2.1	6.4	<0.5		2.9	<0.5	<0.5	<0.5	1.2	1.2		852	168	1.2		1	<0.5	<0.5	<0.5	2.1	<0.5	<0.5	<0.5	0.7	<0.5	<0.1	1	<1	<50	<1	5	<1	7	<1	1.2	40.82481	-72.70124	
SP-52 MA	21-31	68 North Phillips Avenue	1/21/09	1.2	26	8.4	13	6.1	260	<0.5	1.2	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	23	<1	<50	<1	28	1	12	<1	3.4	40.82316	-72.70248	
			1/15/13	0	27.85	0.7	11	5.8	194	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	<20	<4	<2	40.82316	-72.70248			

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Speonk
Permanent Wells

Well Information			Field Parameters							VOC'S																				Metals							Inorganics			Coordinates							
Monitoring Well ID	Screen Interval (feet below grade)	Location	Sample Date	Total Chlorinated VOC's	Depth to Water (feet)	Dissolved Oxygen (mg/L)	Temperature C	PH	Conductivity (umho)	Carbon tetrachloride	Chloroform	Methylene chloride		1,1,1-Trichloroethane	1,1-Dichloroethane	1,1,2-Trichloroethane	1,2-Dichloroethane	1,1,1,2- Tetrachloroethane	1,1,1,2- Tetrachloroethane		Tetrachloroethene	Trichloroethene	1,1-Dichloroethene		1,3- Dichlorobenzene (m)	Benzene	Total Xylene	1,2-Dichloroethane	Carbon tetrachloride	tert-Amyl-Methyl-Ether	Freon 113	m,p-Dichlorobenzene	1,2- Dichlorobenzene (o)	Diethyl ether	MTBE	Iron (mg/L)	Manganese	Arsenic	Zinc	Copper	Aluminum	Chromium	Sulfate mg/L	Nitrite mg/L	Nitrate mg/L	North	West
SP-52M	65-70	68 North Phillips Avenue	1/21/09	2.3	26	2.8	12	5.9	288	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		2.3	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	10	<1	<50	1	<5	<1	18	<1	5.2	40.82316	-72.70248	
			11/18/10	2.9	27.5	7.6	13	7.2	55	<0.5	0.8	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		2.1	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	1	<1	<50	5	30	<1	<5	<1	<5	40.82316	-72.70248		
			9/28/11	2.8	26.29	11	14	7.8	68	<0.5	1.1	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		1.7	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	2	<1	<50	<1	<5	<1	6	<1	<5	40.82316	-72.70248		
			1/15/13	0.8	27.75	0.6	11	5.7	65	<0.5	0.8	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	<5	<1	1.2	40.82316	-72.70248			
SP-81M	60-65	3 Private Road	11/23/10	7.7	21	0.5	14	6	65	0.7	6.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	20	<1	<50	<1	<5	<1	5	<1	<5	40.81994	-72.71484
			9/21/11	180.4	20.21	6.6	17	7.7	57	15	138	<0.5		8	4.4	<0.5	<0.5	<0.5	<0.5		14	1	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1	6	<1	<50	<1	45	<1	<15	<3	<1.5	40.81994	-72.71484			
			1/30/13		21.04	0.7	13	6.9	64	22	177	<0.5		10	<0.5	<0.5	<0.5	<0.5	<0.5		42	4.1	6.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	5	<1	<5	40.81994	-72.71484			
SP-82M	75-80	7 Private Road	11/23/10	78.9	23.65	6.6	14	6	56	9.4	56	<0.5		3.4	<0.5	<0.5	<0.5	<0.5	<0.5		7.5	0.9	1.7		<0.5	<0.5	<0.5	<0.5	9.4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.1	8	<1	<50	<1	24	1	<5	<1	<5	40.81893	-72.7157
			9/15/11	138.7	22.85	6.9	19	7.2	57	12	84	<0.5		6.1	<0.5	<0.5	<0.5	<0.5	<0.5		30	2.2	4.4		<0.5	<0.5	<0.5	<0.5	12	<0.5	<0.5	<0.5	<0.5	<0.5	<1	3	<1	<50	<1	61	1	<5	<1	0.5	40.81893	-72.7157	
			1/9/13	41.7	23.61	0.7	12	6.1	61	3	21	<0.5		1.4	<0.5	<0.5	<0.5	<0.5	<0.5		14	1	1.3		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	P	P	P	P	P	P	5	<1	<5	40.81893	-72.7157			

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