



DATE: 8 June 2009

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SUBJECT: TRIP REPORT – GROUNDWATER AND SOIL SAMPLING, VESTAL
CHLORINATED HYDROCARBON SOURCE ASSESSMENT/REMEDY SITE,
VESTAL, NEW YORK, MARCH 2009 SAMPLING
WORK ASSIGNMENT # 0-198

PURPOSE

The purpose of this investigation was to (1) sample the previously installed EPA groundwater monitor wells at the Vestal Chlorinated Hydrocarbon Source Assessment/Remedy Site, and (2) further refine the extent of soil contamination near the northeastern corner of the site building. Work was carried out by staff of the Response Engineering and Analytical Contract (REAC) in consultation with the Environmental Protection Agency Environmental Response Team (EPA/ERT).

BACKGROUND

The Vestal Hydrocarbon site is located at 200 Stage Road in the Town of Vestal, New York (NY). The site consists of a large one-story building, with an area covering approximately 60,000 square feet, an adjacent parking lot and surrounding open space (Figure 1). The building was last used for circuit board manufacturing but operations were abandoned in May 2002. During 2007, the site building was reoccupied and is now used for recycling of computer and other electronic equipment.

Because of contamination from volatile organic compounds (VOCs) found in a nearby public water supply well, a number of investigations were conducted to characterize the site and delineate the extent of the contamination in soil and groundwater. Remedial studies were completed in 1988 and again in 1992 by Ebasco Services, Inc.TM (Ebasco) under the direction of the U.S. Army Corps of Engineers, (USACE) contractors to the EPA. In 2001, pre-remediation soil samples were collected by Severson Environmental Services (Severson) to determine design parameters for a soil vapor extraction (SVE) system, which was completed in 2003. Following the construction and start-up of the SVE system in the same year, a limited number of soil samples were collected by other contractors in February, September and October of 2005 to evaluate the performance of the system. Analytical results indicated that VOC concentrations in soils still remained high within areas of the site, even though the yield rate of the SVE system decreased during its operation. The SVE system, although in place, is presently not operating but has recovered more than 2,000 pounds of VOCs.

Previous work by Severson and their team members included soil borings to approximately 20 feet below ground surface (bgs) that indicated the site is underlain by silty sands with some gravel. Later work by REAC personnel indicates that these sediments are probably recent alluvial deposits of the Susquehanna River. Reported water levels of approximately 16 to 20 feet bgs are compatible with those measured in the present investigation and appear to represent the piezometric surface of a gravelly semi-confined unit underlying the surficial fine-grained sediments.

In May 2006, REAC personnel collected soil gas samples beneath the building floor and on the south side of the building's exterior. The results indicated that potential VOC sources were present beneath the sub-slab and in at least one area beneath the parking lot. The soil gas sampling was followed in August and September 2006 by soil sampling to depths of approximately 20 to 30 feet bgs using the ERT/REAC Geoprobe™. Continuous cores were collected at 56 locations outside of the building and at six locations inside the building with locations initially based on the results of the soil-gas sampling. Six temporary groundwater monitor wells to depths of approximately 30 feet bgs were also installed and sampled. The results indicated that soils in two areas underlying the parking lot on the south side of the building and beneath at least one area inside the building were contaminated with VOCs exceeding both the Record of Decision (ROD) and the State of New York remedial goals for selected compounds (Lockheed Martin 2007a). In April 2007, REAC personnel installed and sampled 42 sub-slab soil gas wells throughout the site building and conducted an indoor air survey using the TAGA (Lockheed Martin 2007b). The results further confirmed a probable sub-slab source of VOCs centered beneath the production facility in the southwestern portion of the site building.

In November and December 2007, additional soil sampling was completed at 46 locations on the outside of the site building and at seven locations inside the building using the ERT/REAC Geoprobe™. The results indicated that the configuration of the two main areas of soil contamination on the southern side of the site building remained nearly the same as determined in the 2006 investigation. Also, the perimeters of the contaminated areas, as defined by the ROD remedial goals for 1,1,1-trichloroethane (1,1,1-TCA) and trichloroethene (TCE), appeared to be relatively sharp, rather than diffuse. An additional area of contamination where concentrations of 1,1,1-TCA and TCE exceeded clean-up goals was also found just off the northeast corner of the site building. A more precise delineation of this area was one of the goals of the present investigation.

In May and June 2008 REAC installed four groundwater monitor well clusters (ERT-1 through ERT-4) with three clusters on the south side of the site building and one cluster near the northeast corner of the building. Each cluster consisted of three wells with screens set at approximately 15 to 20, 25 to 30 and 45 to 50 feet bgs. The monitor well clusters (Figure 1) coincided approximately with the location of the highest concentration of 1,1,1-TCA within a plume of contaminated soil as determined by previous investigations. The wells were subsequently sampled for VOCs in July 2008.

Also, in July 2008, REAC advanced nine additional soil borings (SB-111 through SB-119) to depths of 20 feet bgs near the northeastern corner of the site building. Borings were continuously cored with soil samples collected and analyzed for VOCs to further refine the extent of contamination in this portion of the site. The results of both the monitor well sampling and the additional borings indicated the presence of both chlorinated VOCs and a floating product phase of aromatic hydrocarbons. The extent of the contamination could not be completely determined to the north because temporary construction spoil piles limited equipment access during the July mobilization.

METHODS

Monitor Well Sampling

On March 31, 2009 the 12 groundwater monitor wells were sampled for VOCs. Before sampling, wells were purged of at least three wells volumes or, if pumped dry, allowed to recover before sampling. Battery powered peristaltic pumps were used for both purging and sampling. Water levels were measured in each well before and during sampling to determine drawdown. Pumping rates were adjusted for minimum drawdown, wherever possible. Samples were collected into 40-milliliter (mL) vials, and submitted in coolers with ice packs under chain-of-custody procedures to the ERT/REAC Laboratory in Edison, New Jersey (NJ). Monitor well locations are indicated on Figure 1 and well completion information is provided on Table 1.

Geoprobe Soil Sampling

On March 30 and 31, 2009, the ERT/REAC Geoprobe was used to continuously core eight additional soil borings (SB-120 through SB-127) to depths of 20 feet bgs. All borings were located near the northeastern corner of the site building (Figure 1) where previous work (Lockheed Martin, 2008) had determined the presence of a floating product on the shallow groundwater table and some additional TCE soil contamination. Five-foot long cores were recovered in acetate sleeves, a lengthwise strip of the sleeve removed, and the cores were screened for VOCs using a Toxic Vapor Analyzer (TVA)-1000 combination flame ionization detector (FID) and photo-ionization detector (PID). Cores were described (Appendix A) and soil samples were collected with stainless steel spoons at those depths showing elevated VOC screening levels, and/or at the bottom of each core. Samples were placed in 8-ounce (oz) glass jars and submitted to the ERT/REAC Laboratory for analysis of VOCs.

RESULTS

Groundwater Samples

Groundwater sampling results for this site visit are summarized in Table 2 and the laboratory analytical reports are attached as Appendix B. For comparison, the July 2008 sampling results are given in Table 2A.

Shallow Monitor Wells

In the 2008 sampling results, samples from the three shallow monitor wells (ERT-1S, ERT-2S, ERT-3S) exhibited the highest total VOC concentrations in each well cluster. In the March 2009 sampling event, the highest concentrations of VOCs were found in the sample from ERT-4S, which contained a total VOC concentration of approximately 879 milligrams per liter (mg/L) or parts per million (ppm) with a TCE concentration of 497 mg/L, a 1,1,1-TCA concentration of 337 mg/L and a 1,1-DCE concentration of 45.3 mg/L. In the July 2008 sampling event, ERT-4S was dry and could not be sampled.

In ERT-1S, the compound cis-1,2-dichloroethene (cis-1,2-DCE) was present at an estimated concentration of 575 mg/L, followed by TCE at 44.3 mg/L, 1,1,1-TCA at 17.8 mg/L and 1,1-dichloroethene (1,1-DCE) at an estimated concentration of 3.3 mg/L (below reporting limit). No aromatic compounds were detected, in contrast to the 2008 sampling results which indicated that a number of aromatic compounds were present in concentrations at ppm levels. However, because of the high concentration of cis-1,2-DCE, the 2009 sample was diluted by a factor of 2,000, thus diluting out the aromatics. The 2008 sample was only diluted by a factor of 1,000 which allowed detection of the aromatics shown on Table 2A. However, fluid level measurements in ERT-1S (Table 1) confirmed the presence of a non-aqueous floating phase as found originally during the 2008 investigation.

Samples from ERT-2S and ERT-3S contained no cis-1,2-DCE but did contain 1,1-DCE at concentrations of 0.306 mg/L and 12.4 mg/L respectively. The compound 1,1-DCA was found in the sample from ERT-2S at an estimated value of 0.101 mg/L but not in the sample from ERT-3S. However, the high reporting limit (5 mg/L) for ERT-3S precluded the detection of 1,1-DCA. The samples from both ERT-2S and ERT-3S contained 1,1,1-TCA at concentrations of 1.62 mg/L and 65.3 mg/L respectively.

Intermediate Monitor wells

As in the 2008 sampling event, the target compound 1,1,1-TCA was found in relatively large amounts in intermediate depth groundwater samples from ERT-2I, ERT-3I, and ERT-4I. The highest concentration detected was approximately 3.40 mg/L in the sample from ERT-4I. The ERT-1I sample contained no 1,1,1-TCA but 2.30 mg/L of cis-1,2-DCE, 1.39 mg/L of TCE and an estimated vinyl chloride concentration of 0.097 mg/L. This was the first detection of vinyl

chloride for the two sampling events. TCE was not detected in intermediate depth monitor wells ERT-2, ERT-3, or ERT-4, but 1,1-DCE and 1,1-DCA were present in low mg/L concentrations.

Deep Monitor Wells

All deep groundwater samples, except that from ERT-1D, contained 1,1,1-TCA with concentrations ranging from 0.062 mg/L in ERT-3D to 2.3 mg/L in the sample from ERT-2D. The compound 1,1-DCA was also found in samples from ERT-2D, ERT-3D and ERT-4D at concentrations ranging between 0.131 mg/L (estimated) and 0.354 mg/L, respectively. Similar to the 2008 sampling event, no TCE was detected in any of the deep groundwater samples.

Soil Samples

Soil analytical results are summarized in Table 3 and soil core descriptions are given in Appendix A. Twenty-seven samples were collected from various cores for analyses of VOCs, based partially on the TVA-1000 screening results. The major target compound, 1,1,1-TCA, was not detected in any sample, which is compatible with results from the July 2008 sampling event where the compound was only detected in one out of 37 samples (boring SB-111 at 17 feet bgs). TCE was present in 11 samples but exceeded the remedial goal of 0.140 milligrams/kilogram (mg/kg) in only two samples – SB-120 at 24 feet bgs (0.150 mg/kg) and SB-121 at 19 feet bgs (0.488 mg/kg). Both of these samples are from inside the area previously mapped by Lockheed Martin (2008) as exceeding the remedial goal for TCE (Figure 2). However, it was still not possible to completely define the northern extent of the TCE remedial area because it apparently extends to the stream and marshy area in the northeastern portion of the site and is not accessible by direct-push sampling equipment.

Cis-1,2-DCE was found in samples from five of the eight boring locations, confirming the results from previous investigations that indicated its presence in this portion of the site. Concentrations ranged from approximately 0.002 mg/kg (estimated) in boring SB-120 at 10 feet, to 1.7 mg/kg in boring SB-123 at 20 feet. Vinyl chloride was also detected for the first time in boring SB-123 at concentrations of 0.003 mg/kg (estimated) and 0.013 mg/kg at depths of 20 and 24 feet bgs respectively.

Aromatic compounds at ppm concentrations were found in the samples from boring SB-127 (Figure 1) down to approximately 10 feet bgs (Table 3) and in lower concentrations down to 25 feet bgs. Samples from adjacent boring SB-123 also contained low concentrations of aromatics. Boring SB-120, located at the northeast corner of the building, likewise confirmed the presence of aromatics, with concentrations up to 73 mg/kg of 1,2,4-trimethylbenzene (Figure 4), as found in the previous sampling event.

CONCLUSIONS

Results of this investigation generally confirm those of the July 2008 sampling event and indicate that VOC concentrations in groundwater are greatest in the shallow monitor wells installed in the uppermost silty unit and decrease by orders of magnitude with depth in the underlying gravels. However, concentrations of 1,1,1-TCA in the low ppm range appear to extend to depths of at least 50 feet at the locations of the ERT-2 and ERT-4 well clusters. The compounds 1,1-DCE and 1,1-DCA are also present at lower orders of magnitude in monitor wells ERT-2D, ERT-3D, and ERT-4D.

Results of the additional soil borings in the northeast corner of the site indicate that the configuration of the area of TCE soil contamination exceeding the 1990 ROD remedial goal (0.140 ppm), remains nearly the same as previously mapped. However, as before, it was still not possible to define the northern edge (Figure 2) because it apparently extends into areas not accessible to boring equipment. No additional 1,1,1-TCA contamination was found and therefore the area of contamination exceeding the 1,1,1-TCA ROD remedial goal of 0.170 ppm remains as previously mapped (Figure 3).

Soils contaminated with aromatic compounds likewise appear to extend northeast from the site building into the wooded area along the stream bordering the northeast portion of the site. The high concentrations

of aromatics in soils above the water table, as seen in boring SB-127, suggest that these soils continue to remain a source area. However, there are no site ROD remedial goals for aromatic compounds.

RECOMMENDATIONS

To better define the vertical extent of contamination, up to three “due-diligence” borings to depths of approximately 80 feet are recommended at the locations of the existing monitor well clusters. Split-spoon samples should be collected every 5 feet, screened for VOCs with a PID and soil samples selected for VOC analysis. The proposed boring locations coincide with the areas of highest soil and groundwater contamination as mapped to date. One additional background boring should also be located outside known areas of contamination. Upon completion, the borings should be converted into 2-inch diameter groundwater monitor wells and sampled for VOCs. In all cases, the uppermost silty zone needs to be isolated with casing that is grouted in place before any boring is advanced to depth.

The extension of the soil area with high concentrations of aromatic compounds to the northeast (Figure 4) suggests that shallow groundwater with a light non-aqueous floating phase may also extend in this direction. Additional shallow monitor wells to depths of 15 to 20 feet are necessary to determine the extent of the product plume and could be installed by direct-push methods.

REFERENCES

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Lockheed Martin. 2007b. Vestal chlorinated hydrocarbon source assessment/remedy site, Vestal, New York, Work Assignment # 0-198, Trip Report – Soil vapor intrusion study (July 25, 2007).

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TABLE 1
WELL CONSTRUCTION AND FLUID LEVEL DATA
VESTAL CHLORINATED HYDROCARBON SOURCE ASSESSMENT/REMEDY SITE
VESTAL, NEW YORK

Well No.	Screen Depth Feet bgs	Depth of Outer Casing - Feet bgs	Elevation -TIC Feet *	Water Level		W. L. Elevation - Feet*		P.L. Feet - TIC	
				Feet - TIC Jul-08	Feet - TIC Mar-09	Feet - TIC Jul-09	Feet - TIC Mar-09	Feet - TIC Jul-08	Feet - TIC Mar-09
ERT-1S	15 - 20	NA	824.41	13.30	13.45	811.11	810.96	12.62	10.30
ERT-1I	25 - 30	0 - 23.5	823.06	14.50	12.06	808.56	811.00		
ERT-1D	45 - 50	0 - 23.5	822.91	14.80	12.17	808.11	810.74		
ERT-2S	12 - 17	NA	824.38	15.12	12.79	809.26	811.59		
ERT-2I	25 - 30	0 - 20	824.24	15.00	12.76	809.24	811.48		
ERT-2D	45 - 50	0 - 20	824.13	14.89	12.65	809.24	811.48		
ERT-3S	11.5 - 16.5	NA	824.41	13.95	12.13	810.46	812.28		
ERT-3I	25 - 30	0 - 20	824.35	15.15	12.90	809.20	811.45		
ERT-3D	45 - 50	0 - 20	824.32	15.81	13.32	808.51	811.00		
ERT-4S	9 - 14	NA	823.55	dry	12.39	dry	811.16		
ERT-4I	25 - 30	0 - 17	823.60	15.20	13.10	808.40	810.50		
ERT-4D	45 - 50	0 - 17	823.73	16.06	13.25	807.67	810.48		

* above mean sea level
bgs = below ground surface
TIC = top of inner casing
P.L. = product level
W. L. = water level
NA = not applicable

TABLE 2
GROUNDWATER ANALYTICAL RESULTS
MARCH 2009 SAMPLING EVENT
VESTAL CHLORINATED HYDROCARBON SOURCE ASSESSMENT/REMEDY SITE
VESTAL, NEW YORK

Analyte	Well No.											
	ERT-1S	ERT-1I	ERT-1D	ERT-2S	ERT-2I	ERT-2D/2D dup	ERT-3S	ERT-3I/3I dup	ERT-3D	ERT-4S	ERT-4I	ERT-4D
Vinyl Chloride	U (10,000)	97.0 J	U (5.0)	U (125)	U (50)	U (250)/U (250)	U (5,000)	U (250)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)
Chloroethane	U (10,000)	U (250)	U (5.0)	U (125)	U (50)	U/U	U (5,000)	U (250)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)
1,1-DCE	3,280 J	U (250)	U (5.0)	306	56.4	378/360	12,400	414/337	9.45	45,300	497	205 J
cis-1,2-DCE	575,000 E	2,280	3.62 J	U (125)	U (50)	U/U	U (5,000)	U (250)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)
1,1-DCA	U (10,000)	U (250)	U (5.0)	101 J	19.2 J	348/354	U (5,000)	94.0 J/94.5 J	78.1	U (12,500)	127 J	131 J
1,1,1-TCA	17,800	U (250)	U (5.0)	1,620	341	2,300/2,280	65,300	1,980/2,230	62	337,000	3,390	1,270
TCE	44,300	1,390	U (5.0)	U (125)	U (50)	U/U	U (5,000)	U (250)/U (125)	U (5.0)	497,000	U (250)	U (250)
PCE	U (10,000)	U (250)	U (5.0)	U (125)	U (50)	U/U	U (5,000)	U (250)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)
Toluene	U (10,000)	U (250)	U (5.0)	U (125)	U (50)	U/U	U (5,000)	U (250)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)
Ethylbenzene	U (10,000)	U (250)	U (5.0)	U (125)	U (50)	U/U	U (5,000)	U (1,000)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)
p&m Xylene	U (20,000)	U (250)	U (10.0)	U (250)	U (100)	U (500)/U (500)	U (10,000)	U (500)/U (250)	U (10.0)	U (25,000)	U (250)	U (250)
0-Xylene	U (10,000)	U (250)	U (5.0)	U (125)	U (50)	U/U	U (5,000)	U (250)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)
Isopropylbenzene	U (10,000)	U (250)	U (5.0)	U (125)	U (50)	U/U	U (20,000)	U (1,000)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)
n-propylbenzene	U (10,000)	U (250)	U (5.0)	U (125)	U (50)	U/U	U (5,000)	U (250)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)
1,3,5-Trimethylbenzene	U (10,000)	U (250)	U (5.0)	U (125)	U (50)	U/U	U (20,000)	U (1,000)/U (125)	U (5.0)	U (12,500)	U (250)	U (500)
1,2,4-Trimethylbenzene	U (10,000)	U (250)	U (5.0)	U (125)	U (50)	U/U	U (5,000)	U (1,000)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)
sec-Butylbenzene	U (10,000)	U (250)	U (5.0)	U (125)	U (50)	U/U	U (20,000)	U (1,000)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)
p-isopropyltoluene	U (10,000)	U (250)	U (5.0)	U (125)	U (50)	U/U	U (20,000)	U (1,000)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)
1,2,4-Trichlorobenzene	U (10,000)	U (250)	U (5.0)	U (125)	U (50)	U/U	U (5,000)	U (250)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)
Napthalene	U (10,000)	U (250)	U (5.0)	U (125)	U (50)	U/U	U (20,000)	U (1,000)/U (125)	U (5.0)	U (12,500)	U (250)	U (250)

micrograms/liter

1,1-DCE = 1,1-Dichloroethene
 cis-1,2-DCE = cis-1,2-Dichloroethene
 1,1-DCA = 1,1-Dichloroethane
 1,1,1-TCA = 1,1,1-Trichloroethane
 TCE = Trichloroethene
 PCE = Tetrachloroethene

dup = duplicate
 U (250) = non-detect (reporting limit)
 Bold = detected compound
 micrograms/liter X 1000 = milligrams/liter
 Only detected compounds indicated

J = estimated value below method reporting limit
 E = estimated

TABLE 2A
GROUNDWATER ANALYTICAL RESULTS
JULY 2008 SAMPLING EVENT
VESTAL CHLORINATED HYDROCARBON SOURCE ASSESSMENT/REMEDY SITE
VESTAL, NEW YORK

Analyte	Well No.										
	ERT-1S	ERT-1I	ERT-1D	ERT-2S	ERT-2I	ERT-2D/DUP	ERT-3S	ERT-3I	ERT-3D	ERT-4I	ERT-4D/DUP
Chloroethane	U	U	U	U	U	U/U	96.0 J	U	U	U	U/U
1,1-DCE	U	U	U	246 J	U	U/U	2,100	U	U	98.0 J	U/U
cis-1,2-DCE	751,000	1,750	4.24 J	U	U	U/U	U	U	U	U	U/U
1,1-DCA	U	U	U	65.5 J	U	628/690	2,710	U	72.7	114 J	83.2J/122
1,1,1-TCA	4,700 J	U	3.14 J	15,000	390	8,090/8,330	232,000	4,280	93.4	2,910	1,100/1,490
TCE	103,000	874	U	U	U	U/U	726	U	U	U	U/U
PCE	U	U	U	U	U	U/U	85.0 J	U	U	U	U/U
Toluene	2,150 J	U	U	U	U	U/U	U	U	U	U	U/U
Ethylbenzene	2,480 J	U	U	U	U	U/U	U	U	U	U	U/U
p&m Xylene	17,300	U	U	U	U	U/U	U	U	U	U	U/U
o-Xylene	11,600	U	U	U	U	U/U	U	U	U	U	U/U
Isopropylbenzene	3,550 J	U	U	U	U	U/U	U	U	U	U	U/U
n-propylbenzene	9,510	U	U	U	U	U/U	U	U	U	U	U/U
1,3,5-Trimethylbenzene	43,000	U	U	U	U	U/U	U	U	U	U	U/U
1,2,4-Trimethylbenzene	140,000	U	U	U	U	U/U	U	U	U	U	U/U
sec-Butylbenzene	3,950 J	U	U	U	U	U/U	U	U	U	U	U/U
p-isopropyltoluene	10,400	U	U	U	U	U/U	U	U	U	U	U/U
1,2,4-Trichlorobenzene	3,450 J	U	U	U	U	U/U	U	U	U	U	U/U
Napthalene	20,000	U	U	U	U	U/U	U	U	U	U	U/U

micrograms/liter

1,1-DCE = 1,1-Dichloroethene
 cis-1,2-DCE = cis-1,2-Dichloroethene
 1,1-DCA = 1,1-Dichloroethane
 1,1,1-TCA - 1,1,1-Trichloroethane
 TCE = Trichloroethene
 PCE = Tetrachloroethene

DUP = duplicate U = non-detect J = estimated value below method reporting limit

micrograms/liter X 1000 = milligrams/liter

Note: Monitor Well ERT-4S was dry at time of sampling

Bold = detected compound

Only detected compounds indicated

TABLE 3
SOIL ANALYTICAL RESULTS
MARCH 2009 SAMPLING
VESTAL CHLORINATED HYDROCARBON SOURCE ASSESSMENT/REMEDY SITE
VESTAL, NEW YORK

Boring/Sample No.	Vinyl Chloride	trans-1,2-Dichloroethene	2-Butanone	cis-1,2-Dichloroethene	Trichloroethene	Toluene	Ethylbenzene	p&m xylene	O-Xylene	Isopropylbenzene	n-Propylbenzene	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	sec-Butylbenzene	p-Isopropyltoluene	Napthalene
SB-120, 5'	U (6.02)	U (6.02)	U (6.02)	U (6.02)	U (6.02)	U (6.02)	U (6.02)	U (12.0)	U (6.02)	U (6.02)	U (6.02)	U (6.02)	U (6.02)	U (6.02)	U (6.02)	U (6.02)
SB-120, 10'	U (5.88)	U (5.88)	3.31 J	1.60 J	U (5.88)	U (5.88)	U (5.88)	U (11.8)	U (5.88)	U (5.88)	U (5.88)	U (5.88)	1.65 J	U (5.88)	U (5.88)	U (5.88)
SB-120, 15'	U (6.020)	U (6.020)	U (6.020)	U (6.020)	U (6.020)	U (6.020)	U (6.020)	U (12,000)	U (6.020)	3,830 J	9,410	23,600	73,000	7,610	9,940	4,510 J
SB-120, 20'	U (6.02)	U (6.02)	U (6.02)	U (6.02)	2.63 J	U (6.02)	U (6.02)	U (12)	U (6.02)	U (6.02)	U (6.02)	U (6.02)	2.87 J	U (6.02)	U (6.02)	U (6.02)
SB-120, 24'	U (6.02)	U (6.02)	U (6.02)	7.37	150	U (6.02)	U (6.02)	U (12)	U (6.02)	U (6.02)	U (6.02)	U (6.02)	U (6.02)	U (6.02)	U (6.02)	U (6.02)
SB-121, 15'	U (6.67)	U (6.67)	12.1	14.1	80.1	U (6.67)	U (6.67)	U (13.3)	U (6.67)	U (6.67)	U (6.67)	U (6.67)	U (6.67)	U (6.67)	U (6.67)	U (6.67)
SB-121, 19'	U (6.33)	U (6.33)	4.63 J	6.62	488	U (6.33)	U (6.33)	U (12.7)	U (6.33)	U (6.33)	U (6.33)	U (6.33)	U (6.33)	U (6.33)	U (6.33)	U (6.33)
SB-121, 25'	U (6.25)	U (6.25)	3.44 J	49.3	6.88	U (6.25)	U (6.25)	U (12.5)	U (6.25)	U (6.33)	U (6.25)	U (6.25)	U (6.25)	U (6.25)	U (6.25)	U (6.25)
SB-122, 15'	U (7.25)	U (7.25)	52.9	4.03 J	44.7	U (7.25)	U (7.25)	U (14.5)	U (7.25)	U (7.25)	U (7.25)	U (7.25)	U (7.25)	U (7.25)	U (7.25)	U (7.25)
SB-122, 20'	U (6.41)	4.24 J	12.5	519	U (6.41)	U (6.41)	U (6.41)	U (12.8)	U (6.41)	U (6.41)	U (6.41)	U (6.41)	U (6.41)	U (6.41)	U (6.41)	U (6.41)
SB-122, 25'	U (6.67)	U (6.67)	13.7	123	U (6.67)	U (6.67)	U (6.67)	U (13.3)	U (6.67)	U (6.67)	U (6.67)	U (6.67)	U (6.67)	U (6.67)	U (6.67)	U (6.67)
SB-123, 10'	U (5.95)	U (5.95)	U (5.95)	U (5.95)	U (5.95)	U (5.95)	U (5.95)	U (11.9)	5.64 J	35.4	65.5	126	230	80.0	58.0	17.2
SB-123, 15'	U (6.67)	6.43 J	45.3	65.7	127	2.48 J	2.08 J	U	1.80 J	11.4	5.81 J	U (13.3)	5.39 J	10.3	1.92 J	3.65 J
SB-123, 20'	3.07 J	24.6	18.6	1,710	2.25 J	U (6.58)	U (6.58)	U (13.2)	U (6.58)	U (6.58)	U (6.58)	U (6.58)	U (6.58)	U (6.58)	U (6.58)	U (6.58)
SB-123, 24'	12.9	15.9	14.6	1,690	U (6.58)	1.89 J	U (6.58)	U (13.2)	U (6.58)	U (6.58)	U (6.58)	U (6.58)	U (6.58)	U (6.58)	U (6.58)	U (6.58)
SB-124, 15'	U (6.49)	U (6.49)	U (6.49)	U (6.49)	U (6.49)	U (6.49)	U (6.49)	U (13.0)	U (6.49)	U (6.49)	U (6.49)	U (6.49)	U (6.49)	U (6.49)	U (6.49)	U (6.49)
SB-124, 23'	U (6.58)	U (6.58)	U (6.58)	U (6.58)	6.66	U (6.58)	U (6.58)	U (13.2)	U (6.58)	U (6.58)	U (6.58)	U (6.58)	U (6.58)	U (6.58)	U (6.58)	U (6.58)
SB-125, 15'	U (6.17)	U (6.17)	U (6.17)	U (6.17)	U (6.17)	U (6.17)	U (6.17)	U (12.3)	U (6.17)	U (6.17)	U (6.17)	U (6.17)	U (6.17)	U (6.17)	U (6.17)	U (6.17)
SB-125, 20'	U (6.33)	U (6.33)	U (6.33)	U (6.33)	5.20 J	U (6.33)	U (6.33)	U (12.7)	U (6.33)	U (6.33)	U (6.33)	U (6.33)	U (6.33)	U (6.33)	U (6.33)	U (6.33)
SB-126, 15'	U (6.25)	U (6.25)	U (6.25)	U (6.25)	U (6.25)	U (6.25)	U (6.25)	U (12.5)	U (6.25)	U (6.25)	U (6.25)	U (6.25)	1.75 J	U (6.25)	U (6.25)	U (6.25)
SB-126, 16.5'	U (6.41)	U (6.41)	U (6.41)	U (6.41)	24.8	U (6.41)	U (6.41)	U (12.8)	U (6.41)	U (6.41)	U (6.41)	U (6.41)	U (6.41)	U (6.41)	U (6.41)	U (6.41)
SB-127, 6.5'	U (633)	U (633)	U (633)	U (633)	U (633)	161 J	1,670	11,200	2,830	2,310	4,510	21,300	40,000	5,020	7,470	5,740 B
SB-127, 10'	U (29.8)	U (29.8)	U (29.8)	U (29.8)	U (29.8)	U (29.8)	15.4 J	369	U (29.8)	123	328	2,170	3,960	250	768	U (29.8)
SB-127, 11.5'	U (298)	U (298)	U (298)	U (298)	U (298)	U (298)	U (298)	210 J	U (298)	U (298)	104 J	413	930	U (298)	187 J	344 B
SB-127, 15'	U (67.6)	U (67.6)	U (67.6)	U (67.6)	U (67.6)	345	116	685	547	73.9	97.6	675	1,520	24.2 J	53.4 J	121
SB-127, 20'	U (6.33)	U (6.33)	4.10 J	U (6.33)	U (6.33)	35.3	4.77 J	21.3	18.6	U (6.33)	6.61	23.9	69.9	3.04 J	14.9	4.09 J
SB-127, 25'	U (32.1)	U (32.1)	U (32.1)	99.6	U (32.1)	21.9 J	29.5 J	86.6	36.1	28.6 J	67.1	285	819	19.0 J	173	264

micrograms/kilogram

Results are reported as dry weight

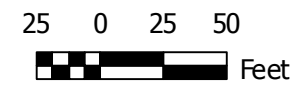
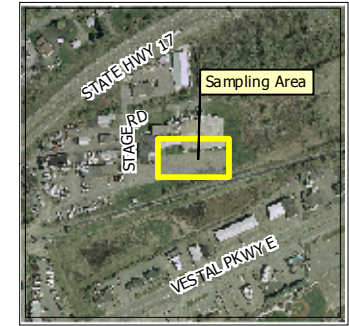
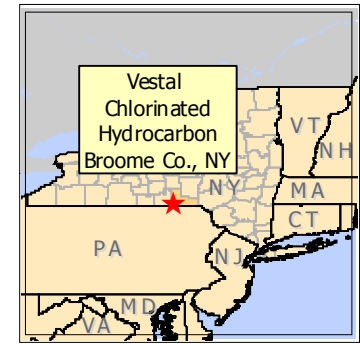
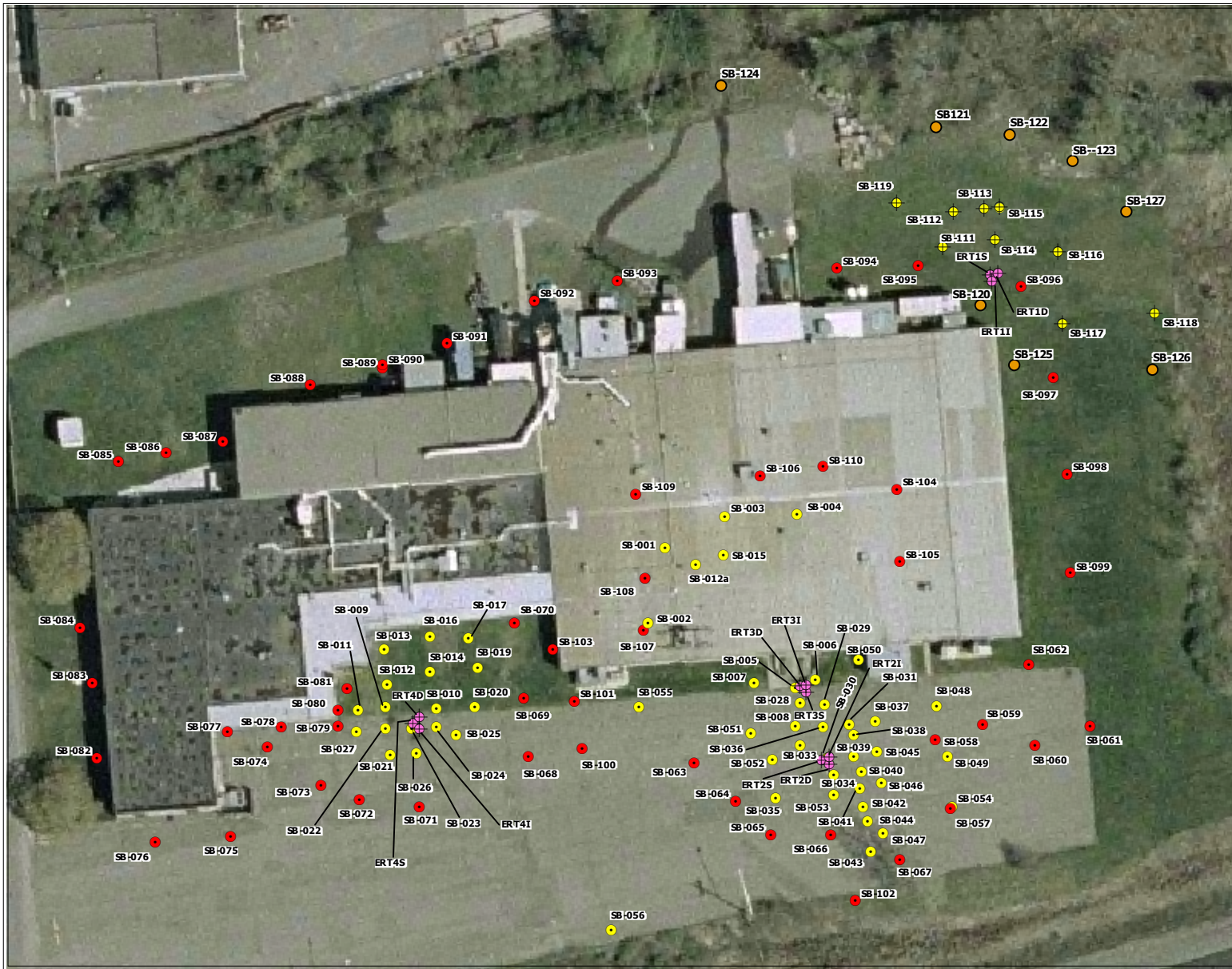
J = Estimated value below method reporting limit U (6.25) = non-detect (reporting limit)

B = compound found in blank

Bold = detected compound

Only detected compounds indicated

micrograms/kilogram X 1000 = milligrams/kilogram

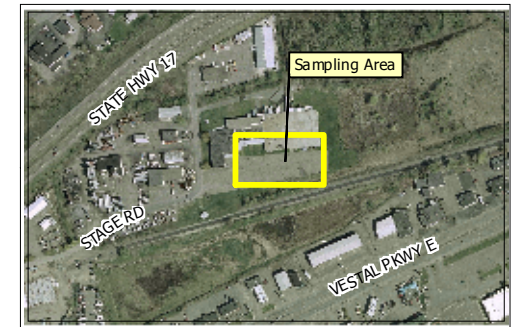
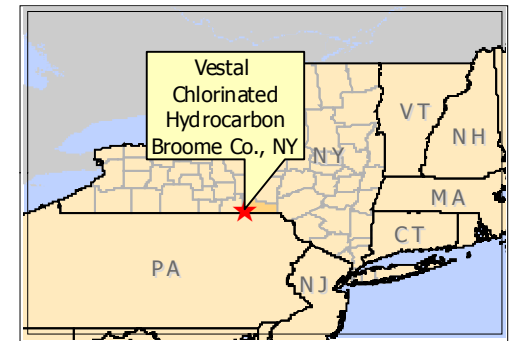
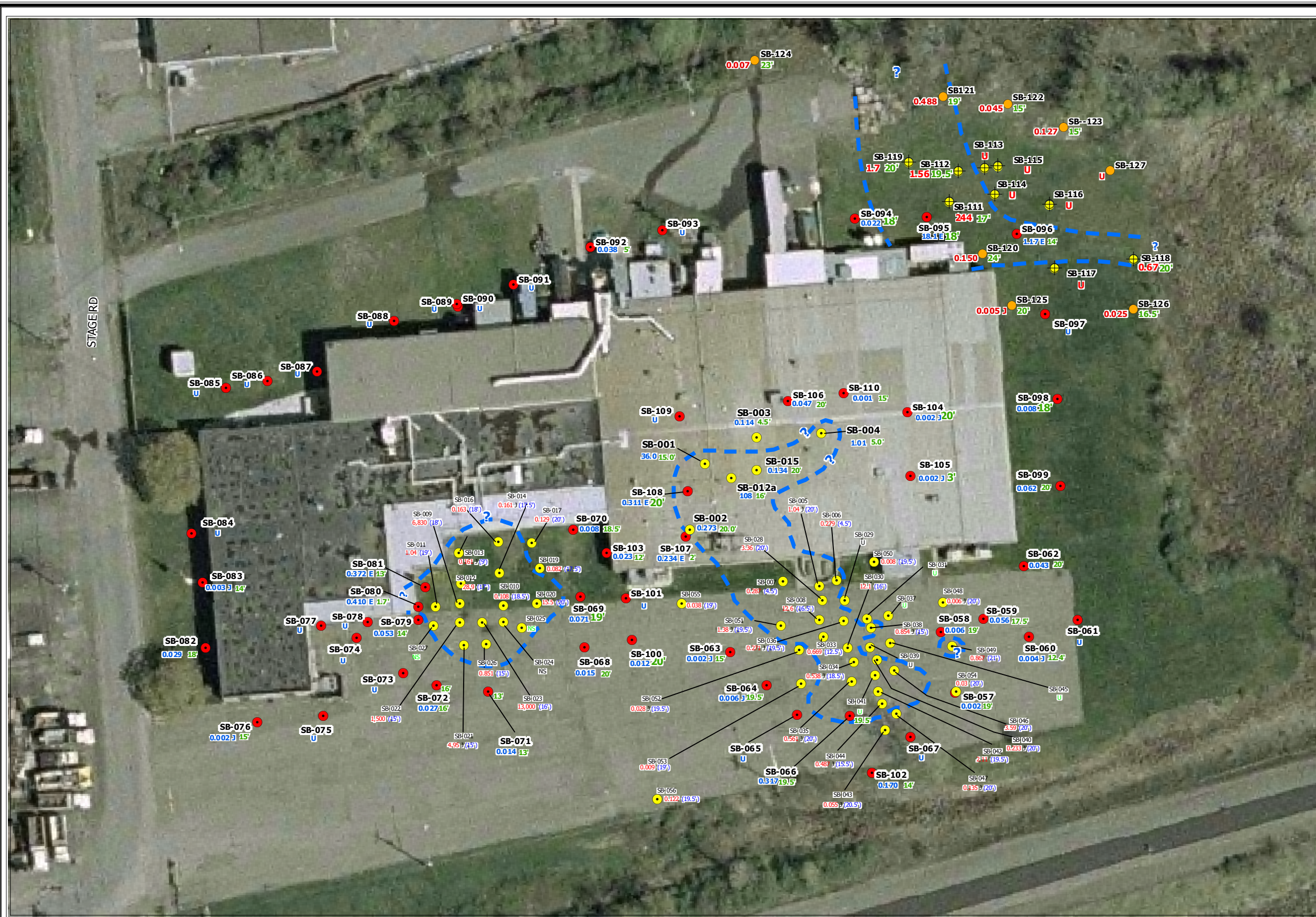


- Legend**
- ERT Monitor Well
 - Soil Boring (March 2009)
 - Soil Boring (July 2008)
 - Soil Boring (November/December 2007)
 - Soil Boring (August/September 2006)

Map created using NY DOT DOQQ (2002) and site survey
 GPS data. GPS collected in Lat., Lon., Decimal Degrees, WGS84
 Map Creation Date: May 2009
 Coordinate system: New York State Plane (Central)
 FIPS: 3102
 Datum: NAD83
 Units: Feet
 Data: g:\arcview\projects\react\00-198
 MXD file: g:\arcview\projects\react\00-198_VestalHydrocarbon\198_052009\
 198_borwells_F1_(052009)

U.S. EPA Environmental Response Team
 Response Engineering and Analytical Contract
 EP-C-04-032
 W.A.# 0-198

Figure 1
 Boring and Monitor Well
 Location Map
 Vestal Chlorinated Hydrocarbon Site
 Vestal, New York



Legend

- Soil Boring (March 2009)
- ⊕ Soil Boring (July 2008)
- Soil Boring (November/December 2007)
- Soil Boring (August/September 2006)
- 0.003 Concentration (mg/kg)
- 18.5' Sample Depth - Feet Below Ground Surface
- TCE: Trichloroethylene
- U: Non Detect
- J: Estimated Value under the Reporting Limit
- E: Estimated Value
- NS: Not Sampled
- mg/kg milligrams/kilogram
- ppm parts / million
- Area Inside Record of Decision
0.140 ppm Remedial Goal



Map created using NY DOT DOQQ (2002) and site survey
GPS data. GPS collected in Lat., Lon., Decimal Degrees, WGS84

Map Creation Date: 26 May 2009

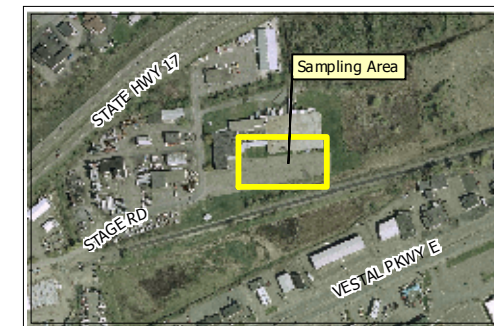
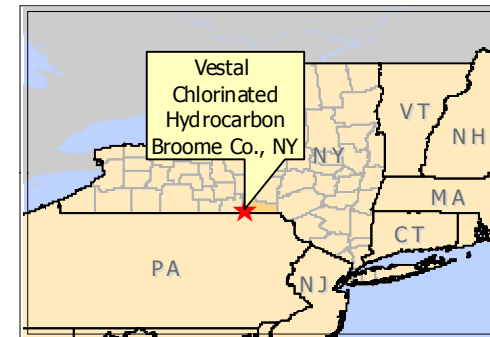
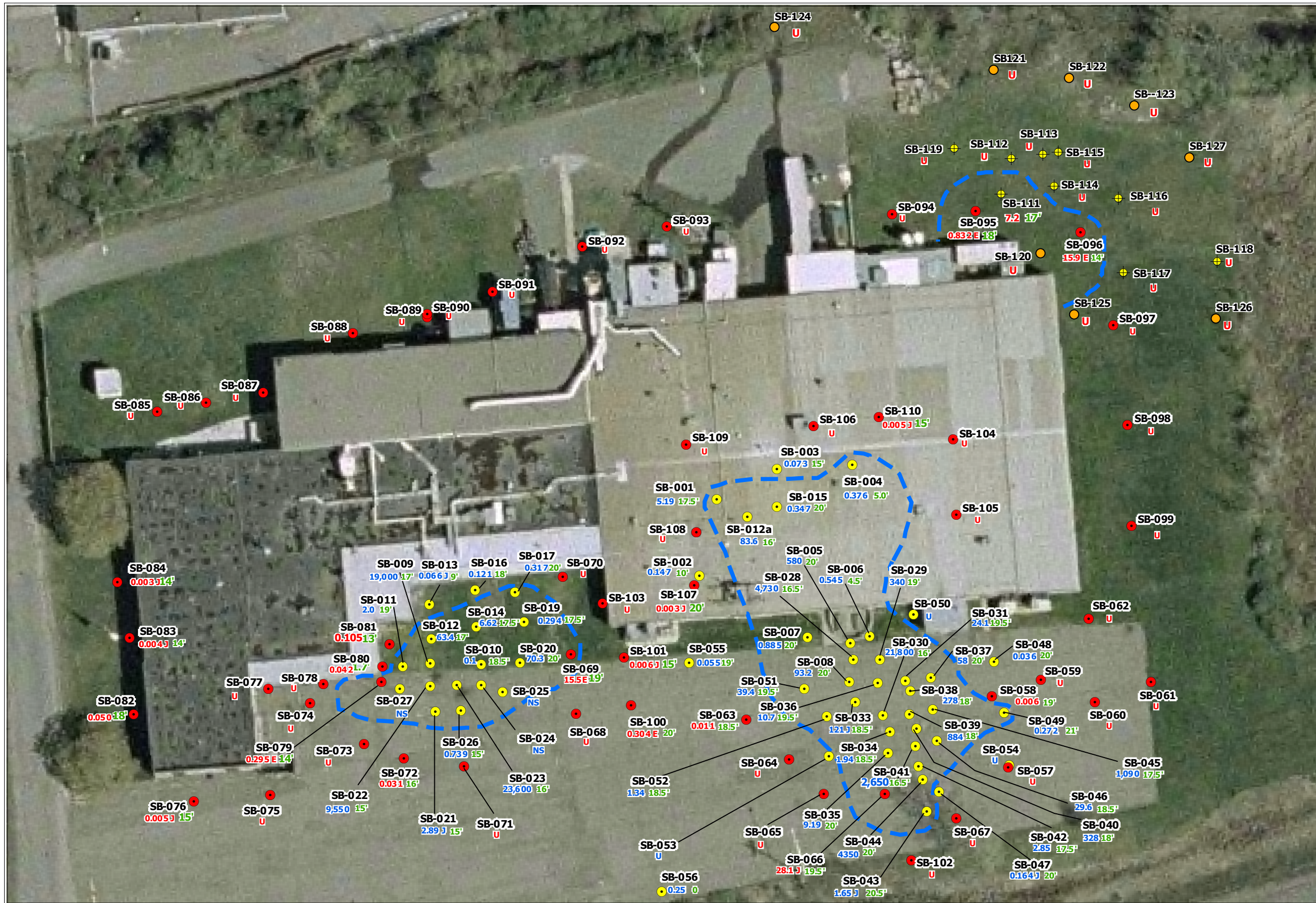
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FIPS: 3102
Datum: NAD83
Units: Feet

Data: g:\arcviewprojects\reac\400-198
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U.S. EPA Environmental Response Team
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EP-C-04-032
W.A.# 0-198

Figure 2
Maximum - TCE Concentrations
in Soil Samples (mg/kg)
Vestal Chlorinated Hydrocarbon Site
Vestal, New York



Legend

- Soil Boring (March 2009)
- ⊕ Soil Boring (July 2008)
- Soil Boring (November/December 2007)
- Soil Boring (August/September 2006)
- 0.031 Concentration (mg/kg)
- 18.5' Sample Depth - Feet Below Ground Surface
- 1,1,1-TCA:** 1,1,1 - Trichloroethane
- U:** Non Detect
- J:** Estimated Value under the Reporting Limit
- E:** Estimated Value
- NS:** Not Sampled
- mg/kg** milligrams/kilogram
- ppm** parts / million
- Area Inside Record of Decision
0.170 ppm Remedial Goal



Map created using NY DOT DOQQ (2002) and site survey
GPS data. GPS collected in Lat, Lon, Decimal Degrees, WGS84

Map Creation Date: 26 mAY 2009

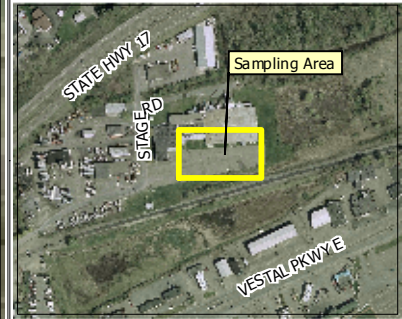
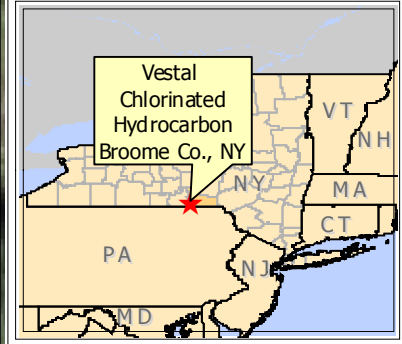
Coordinate system: New York State Plane (Central)
FIPS: 3102
Datum: NAD83
Units: Feet

Data: g:\arcview\projects\reac\400-198
MXD file: g:\arcinfo\projects\reac\4\VEAC00198_VestalHydrocarbon\198_052009\198_boringmap_F3_TCA



U.S. EPA Environmental Response Team
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EP-C-04-032
W.A.# 0-198

Figure 3
Maximum 1,1,1- TCA Concentrations
in Soil Samples (mg/kg)
Vestal Chlorinated Hydrocarbon Site
Vestal, New York



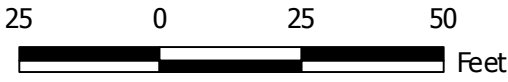
Legend

- Soil Boring (March 2009)
- ⊕ Soil Boring (July 2008)
- 0.003 Concentration (mg/kg)
- 18.5' Sample Depth - Feet Below Ground Surface
- U: Non Detect
- J: Estimated Value under the Reporting Limit
- E: Estimated Value
- mg/kg milligrams/kilogram
- - - Probable Area Underlain by Light Non-Aqueous Phase

Map created using NY DOT DOQQ (2002) and site survey GPS data. GPS collected in Lat., Lon., Decimal Degrees, WGS84

Map Creation Date: 27 May 2009

Coordinate system: New York State Plane (Central)
 FIPS: 3102
 Datum: NAD83
 Units: Feet



U.S. EPA Environmental Response Team
 Response Engineering and Analytical Contract
 EP-C-04-032
 W.A.# 0-198

Figure 4
 Maximum 1,2,4 Trimethylbenzene Concentrations in Soil Samples (mg/kg)
 Vestal Chlorinated Hydrocarbon Site
 Vestal, New York

Data: g:\arcviewprojects\reac4\00-198
 MXD file: g:\arcinfo\projects\reac4\EAC00198_VestalHydrocarbon\198_052009\198_boringmap_F4_Trbenz.mxd

APPENDIX A
SOIL CORE DESCRIPTIONS
VESTAL CHLORINATED HYDROCARBON SOURCE/ASSESSMENT REMEDY SITE
VESTAL, NEW YORK

BORING LOGS

Depth (feet bgs)	Recovery %	PID - ppm	Lithology
SB-120			
0 - 5	65	NA	TOPSOIL to 0.5 ft, underlain by SILT, brown, slightly cohesive, moist CLAY to 6.5 FT, brown to gray, silty, moist to wet, cohesive underlain by SILT, brown to gray, clayey, slightly cohesive SILT, dark gray, sandy, clayey, uniform, saturated, odor CLAY, silty to SILT, clayey, uniform, saturated CLAY, to 21 ft, brown silty, cohesive, wet, underlain by SILT to 22.5 ft, dark gray, slightly sandy, underlain by large GRAVEL, sandy
5 - 10	85	NA	
10 - 15	75	NA	
15 - 20	80	NA	
20 - 25	55	NA	
SB-121			
0 - 5	10	NA	FILL: large GRAVEL and SILT FILL to 9.5 ft, underlain by 6-inches of dark gray CLAY, dense, dry CLAY, gray-brown, silty, cohesive, with plant fragments CLAY, gray, silty, moderately cohesive, uniform, wet CLAY, dark gray, silty, uniform, grades downward to fine gray-brown SAND at 25 ft, plant fragments at 25 ft
5 - 10	50	NA	
10 - 15	80	NA	
15 - 20	NA	NA	
20 - 25	80	NA	
SB-122			
0 - 5	NA	NA	FILL: large GRAVEL and SILT FILL to 6.5 ft, underlain by SILT, brown to gray, mottled, dense, dry CLAY to 13.5 ft, dark gray, silty underlain by dark red-brown SILT, laminated, rare organic matter, dry to moist, faint H ₂ S odor CLAY, dark red-brown, silty, to SILT, clayey, uniform, rare organic matter, dry to moist SILT, dark gray, clayey, grading downward to very fine SAND, laminated, with plant fragments, wet
5 - 10	100	NA	
10 - 15	80	NA	
15 - 20	NA	NA	
20 - 25	100	NA	
SB-123			
0 - 5	40	NA	FILL FILL to 5.5 ft, underlain by SILT, gray-brown, slightly clayey, mottled friable, grades to silty CLAY from 8 to 10 ft, dry SILT, gray, slightly clayey, mottled, grades to red-brown from 13 to 15 ft, dry CLAY, silty, dark gray, uniform, moist CLAY, dark gray, silty, uniform, moist to wet, GRAVEL at 25 ft
5 - 10	NA	NA	
10 - 15	80	NA	
15 - 20	60	NA	
20 - 25	80	NA	
SB-124			
0 - 5	40	0	FILL SILT, brown, slightly clayey, mottled, uniform, dense SILT, dark gray, slightly clayey, saturated SILT, dark gray, slightly clayey, saturated SAND to 23.5 ft, very fine to SILT, dark gray, underlain by very coarse GRAVEL to COBBLES, saturated
5 - 10	95	0	
10 - 15	65	0	
15 - 20	60	0	
20 - 25	45	0 - 1	
SB-125			
0 - 5	45	0 - 0.5	SILT, brown, friable, dry FILL with brick fragments to 7.5 ft, underlain by SILT, red-brown to very fine SAND, dry SILT, brown, mottled, grading down to very fine silty SAND from 13 to 15 ft, wet at 11.5 ft SILT, brown, clayey, saturated GRAVEL, very large, saturated
5 - 10	100	0 - 1	
10 - 15	NA	0 - 1	
15 - 20	70	0.5 - 1	
20 - 25	50	0 - 1	
SB-126			
0 - 5	40	1	TOPSOIL and FILL SILT, red-brown, slightly clayey, mottled, friable, dry SILT, brown, with some very fine sand, slightly clayey, saturated at 11 ft SILT, dark gray, to very fine SAND to 17 ft, underlain by GRAVEL, large, poorly sorted
5 - 10	85	0 - 1	
10 - 15	100	1 - 1.8	
15 - 20	60	0.2 at 15.5 ft	
SB-127			
0 - 5	75	0.1 - 0.5	SILT, mottled, dry, probably fill SILT, dark gray, slightly clayey, friable, dry, odor SILT, dark gray, clayey, moist to wet SILT, gray, slightly, sandy, slightly clayey, wood fragments at 16 ft, saturated SILT, dark gray, clayey, to silty CLAY, slightly sandy, saturated
5 - 10	NA	130 ppm at 6.5 ft, 25 - 75 ppm rest of core	
10 - 15	85	20 - 60 ppm	
15 - 20	95	0.5 - 0.8	
20 - 25	NA	0.4 - 1.4	

bgs = below ground surface

ft = feet

PID = photo-ionization detector

NA = not available

ppm = parts per million

% = percent

APPENDIX B
PRELIMINARY LABORATORY ANALYTICAL REPORT
VESTAL CHLORINATED HYDROCARBON SOURCE/ASSESSMENT REMEDY SITE
VESTAL, NEW YORK

Date: 05/04/09
To: Work Assignment Manager T. Johnson, EPA/ERTC _____
From: Yi-Hua Lin, Organic Group Leader, Analytical Section, REAC *Yi-Hua Lin*
Thru: Vinod Kansal, Analytical Section Leader, REAC *Vinod Kansal*
Subject: Preliminary Results of Project Vestal WA# 0-198

Attached please find the preliminary results of the above referenced project for the following samples:

Chain(s) of Custody No.:0198-033009-50; 0198-033109-51; 0198-033109-52

Analysis: VOC

No. of Samples: 27/15

Matrix: Soils/Waters

Note: Samples on Pages 12-14 analyzed out of Holding time.

cc Raj Singhvi
Central File
Analyst: A. Vaidya

Table 1.1 Result of the Analysis for VOC in Soil
WA # 0-198 Vestal,

Method: REAC SOP 1807

Sample Number	Soil Blank C 040309-1		1002		1004		1005		1006	
	Soil Blank C 040309-1		SB-120, 10'		SB-120, 20'		SB-120, 24'		SB-121, 15'	
Sample Location:	1		1		1		1		1	
Dilution Factor	1		1		1		1		1	
Percent_Solids	100		85		83		83		75	
File:	CV0803.D		CV0813.D		CV0816.D		CV0817.D		CV0818.D	
Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Chloromethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Vinyl Chloride	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Bromomethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Chloroethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Trichlorofluoromethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Acetone	U	20.0	23.6	23.5	U	24.1	U	24.1	41.0	26.7
1,1-Dichloroethene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Methylene Chloride	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Carbon Disulfide	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Methyl tert-Butyl Ether	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
trans-1,2-Dichloroethene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,1 Dichloroethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
2-Butanone	U	5.00	3.31	5.88	U	6.02	U	6.02	12.1	6.67
2,2-Dichloropropane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
cis-1,2-Dichloroethene	U	5.00	1.60	5.88	U	6.02	7.37	6.02	14.1	6.67
Chloroform	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,1-Dichloropropene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,2-Dichloroethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,1,1-Trichloroethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Carbon Tetrachloride	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Benzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Trichloroethene	U	5.00	U	5.88	2.63	6.02	150	6.02	80.1	6.67
1,2-Dichloropropane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Bromodichloromethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Dibromomethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
cis-1,3-Dichloropropene	U	20.0	U	23.5	U	24.1	U	24.1	U	26.7
trans-1,3-Dichloropropene	U	20.0	U	23.5	U	24.1	U	24.1	U	26.7
1,1,2-Trichloroethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,3-Dichloropropane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Dibromochloromethane	U	20.0	U	23.5	U	24.1	U	24.1	U	26.7
1,2-Dibromoethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Bromoform	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
4-Methyl-2-Pentanone	U	20.0	U	23.5	U	24.1	U	24.1	U	26.7
Toluene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
2-Hexanone	U	20.0	U	23.5	U	24.1	U	24.1	U	26.7
Tetrachloroethene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Chlorobenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,1,1,2-Tetrachloroethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Ethylbenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
p&m-Xylene	U	10.0	U	11.8	U	12.0	U	12.0	U	13.3
o-Xylene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Styrene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Isopropylbenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,1,2,2-Tetrachloroethane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,2,3-Trichloropropane	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
n-Propylbenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Bromobenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,3,5-Trimethylbenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
2-Chlorotoluene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
4-Chlorotoluene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
tert-Butylbenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,2,4-Trimethylbenzene	U	5.00	1.65	5.88	2.87	6.02	U	6.02	U	6.67
sec-Butylbenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
p-Isopropyltoluene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,3-Dichlorobenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,4-Dichlorobenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
n-Butylbenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,2-Dichlorobenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,2-Dibromo-3-Chloropropane	U	20.0	U	23.5	U	24.1	U	24.1	U	26.7
1,2,4-Trichlorobenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Hexachlorobutadiene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
Naphthalene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67
1,2,3-Trichlorobenzene	U	5.00	U	5.88	U	6.02	U	6.02	U	6.67

Table 1.1 Result of the Analysis for VOC in Soil
WA # 0-198 Vestal,

Method: REAC SOP 1807

Sample Number	Soil Blank C 040309-1	1007
Sample Location:		SB-121, 19'
Dilution Factor	1	1
Percent_Solids	100	79
File:	CV0803.D	CV0819.D

Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	5.00	U	6.33
Chloromethane	U	5.00	U	6.33
Vinyl Chloride	U	5.00	U	6.33
Bromomethane	U	5.00	U	6.33
Chloroethane	U	5.00	U	6.33
Trichlorofluoromethane	U	5.00	U	6.33
Acetone	U	20.0	18.2 J	25.3
1,1-Dichloroethene	U	5.00	U	6.33
Methylene Chloride	U	5.00	U	6.33
Carbon Disulfide	U	5.00	U	6.33
Methyl tert-Butyl Ether	U	5.00	U	6.33
trans-1,2-Dichloroethene	U	5.00	U	6.33
1,1 Dichloroethane	U	5.00	U	6.33
2-Butanone	U	5.00	4.63 J	6.33
2,2-Dichloropropane	U	5.00	U	6.33
cis-1,2-Dichloroethene	U	5.00	6.62	6.33
Chloroform	U	5.00	U	6.33
1,1-Dichloropropene	U	5.00	U	6.33
1,2-Dichloroethane	U	5.00	U	6.33
1,1,1-Trichloroethane	U	5.00	U	6.33
Carbon Tetrachloride	U	5.00	U	6.33
Benzene	U	5.00	U	6.33
Trichloroethene	U	5.00	488	31.6
1,2-Dichloropropane	U	5.00	U	6.33
Bromodichloromethane	U	5.00	U	6.33
Dibromomethane	U	5.00	U	6.33
cis-1,3-Dichloropropene	U	20.0	U	25.3
trans-1,3-Dichloropropene	U	20.0	U	25.3
1,1,2-Trichloroethane	U	5.00	U	6.33
1,3-Dichloropropane	U	5.00	U	6.33
Dibromochloromethane	U	20.0	U	25.3
1,2-Dibromoethane	U	5.00	U	6.33
Bromoform	U	5.00	U	6.33
4-Methyl-2-Pentanone	U	20.0	U	25.3
Toluene	U	5.00	U	6.33
2-Hexanone	U	20.0	U	25.3
Tetrachloroethene	U	5.00	U	6.33
Chlorobenzene	U	5.00	U	6.33
1,1,1,2-Tetrachloroethane	U	5.00	U	6.33
Ethylbenzene	U	5.00	U	6.33
p&m-Xylene	U	10.0	U	12.7
o-Xylene	U	5.00	U	6.33
Styrene	U	5.00	U	6.33
Isopropylbenzene	U	5.00	U	6.33
1,1,2,2-Tetrachloroethane	U	5.00	U	6.33
1,2,3-Trichloropropane	U	5.00	U	6.33
n-Propylbenzene	U	5.00	U	6.33
Bromobenzene	U	5.00	U	6.33
1,3,5-Trimethylbenzene	U	5.00	U	6.33
2-Chlorotoluene	U	5.00	U	6.33
4-Chlorotoluene	U	5.00	U	6.33
tert-Butylbenzene	U	5.00	U	6.33
1,2,4-Trimethylbenzene	U	5.00	U	6.33
sec-Butylbenzene	U	5.00	U	6.33
p-Isopropyltoluene	U	5.00	U	6.33
1,3-Dichlorobenzene	U	5.00	U	6.33
1,4-Dichlorobenzene	U	5.00	U	6.33
n-Butylbenzene	U	5.00	U	6.33
1,2-Dichlorobenzene	U	5.00	U	6.33
1,2-Dibromo-3-Chloropropane	U	20.0	U	25.3
1,2,4-Trichlorobenzene	U	5.00	U	6.33
Hexachlorobutadiene	U	5.00	U	6.33
Naphthalene	U	5.00	U	6.33
1,2,3-Trichlorobenzene	U	5.00	U	6.33

Table 1.1 Result of the Analysis for VOC in Soil
WA # 0-198 Vestal,

Method: REAC SOP 1807

Sample Number	Soil Blank C 040409-1		1001		1008		1009		1010	
	Sample Location:		SB-120, 5'		SB-121, 25'		SB-122, 15'		SB-122, 20'	
Dilution Factor	1		1		1		1		1	
Percent_Solids	100		83		80		69		78	
File:	CV0829.D		CV0830.D		CV0834.D		CV0835.D		CV0836.D	
Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Chloromethane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Vinyl Chloride	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Bromomethane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Chloroethane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Trichlorofluoromethane	U	5.00	U	6.02	1.74	J 6.25	13.7	7.25	3.45	J 6.41
Acetone	U	20.0	7.48	J 24.1	21.4	J 25.0	200	29.0	61.3	25.6
1,1-Dichloroethene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Methylene Chloride	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Carbon Disulfide	U	5.00	U	6.02	U	6.25	3.16	J 7.25	U	6.41
Methyl tert-Butyl Ether	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
trans-1,2-Dichloroethene	U	5.00	U	6.02	U	6.25	U	7.25	4.24	J 6.41
1,1 Dichloroethane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
2-Butanone	U	5.00	U	6.02	3.44	J 6.25	52.9	7.25	12.5	6.41
2,2-Dichloropropane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
cis-1,2-Dichloroethene	U	5.00	U	6.02	49.3	6.25	4.03	J 7.25	519	32.1
Chloroform	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,1-Dichloropropene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,2-Dichloroethane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,1,1-Trichloroethane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Carbon Tetrachloride	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Benzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Trichloroethene	U	5.00	U	6.02	6.88	6.25	44.7	7.25	U	6.41
1,2-Dichloropropane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Bromodichloromethane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Dibromomethane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
cis-1,3-Dichloropropene	U	20.0	U	24.1	U	25.0	U	29.0	U	25.6
trans-1,3-Dichloropropene	U	20.0	U	24.1	U	25.0	U	29.0	U	25.6
1,1,2-Trichloroethane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,3-Dichloropropane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Dibromochloromethane	U	20.0	U	24.1	U	25.0	U	29.0	U	25.6
1,2-Dibromoethane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Bromoform	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
4-Methyl-2-Pentanone	U	20.0	U	24.1	U	25.0	U	29.0	U	25.6
Toluene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
2-Hexanone	U	20.0	U	24.1	U	25.0	U	29.0	U	25.6
Tetrachloroethene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Chlorobenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,1,1,2-Tetrachloroethane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Ethylbenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
p&m-Xylene	U	10.0	U	12.0	U	12.5	U	14.5	U	12.8
o-Xylene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Styrene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Isopropylbenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,1,2,2-Tetrachloroethane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,2,3-Trichloropropane	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
n-Propylbenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Bromobenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,3,5-Trimethylbenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
2-Chlorotoluene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
4-Chlorotoluene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
tert-Butylbenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,2,4-Trimethylbenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
sec-Butylbenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
p-Isopropyltoluene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,3-Dichlorobenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,4-Dichlorobenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
n-Butylbenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,2-Dichlorobenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,2-Dibromo-3-Chloropropane	U	20.0	U	24.1	U	25.0	U	29.0	U	25.6
1,2,4-Trichlorobenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Hexachlorobutadiene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
Naphthalene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41
1,2,3-Trichlorobenzene	U	5.00	U	6.02	U	6.25	U	7.25	U	6.41

Table 1.1 Result of the Analysis for VOC in Soil
WA # 0-198 Vestal,

Method: REAC SOP 1807

Sample Number	Soil Blank C 040409-1		1012		1014		1015		07643	
	1		SB-123, 10'		SB-123, 20'		SB-123, 24'		SB-126, 16.5'	
Dilution Factor	1		1		1		1		1	
Percent_Solids	100		84		76		76		78	
File:	CV0829.D		CV0838.D		CV0840.D		CV0841.D		CV0843.D	
Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Chloromethane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Vinyl Chloride	U	5.00	U	5.95	3.07 J	6.58	12.9	6.58	U	6.41
Bromomethane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Chloroethane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Trichlorofluoromethane	U	5.00	U	5.95	2.20 J	6.58	U	6.58	U	6.41
Acetone	U	20.0	13.4 J	23.8	65.3	26.3	51.0	26.3	11.7 J	25.6
1,1-Dichloroethene	U	5.00	U	5.95	U	6.58	3.05 J	6.58	U	6.41
Methylene Chloride	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Carbon Disulfide	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Methyl tert-Butyl Ether	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
trans-1,2-Dichloroethene	U	5.00	U	5.95	24.6	6.58	15.9	6.58	U	6.41
1,1 Dichloroethane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
2-Butanone	U	5.00	U	5.95	18.6	6.58	14.6	6.58	U	6.41
2,2-Dichloropropane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
cis-1,2-Dichloroethene	U	5.00	U	5.95	1710	132	1690	132	U	6.41
Chloroform	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
1,1-Dichloropropene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
1,2-Dichloroethane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
1,1,1-Trichloroethane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Carbon Tetrachloride	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Benzene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Trichloroethene	U	5.00	U	5.95	2.25 J	6.58	U	6.58	24.8	6.41
1,2-Dichloropropane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Bromodichloromethane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Dibromomethane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
cis-1,3-Dichloropropene	U	20.0	U	23.8	U	26.3	U	26.3	U	25.6
trans-1,3-Dichloropropene	U	20.0	U	23.8	U	26.3	U	26.3	U	25.6
1,1,2-Trichloroethane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
1,3-Dichloropropane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Dibromochloromethane	U	20.0	U	23.8	U	26.3	U	26.3	U	25.6
1,2-Dibromoethane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Bromoform	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
4-Methyl-2-Pentanone	U	20.0	U	23.8	U	26.3	U	26.3	U	25.6
Toluene	U	5.00	U	5.95	U	6.58	1.89 J	6.58	U	6.41
2-Hexanone	U	20.0	U	23.8	U	26.3	U	26.3	U	25.6
Tetrachloroethene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Chlorobenzene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
1,1,1,2-Tetrachloroethane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Ethylbenzene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
p&m-Xylene	U	10.0	5.64 J	11.9	U	13.2	U	13.2	U	12.8
o-Xylene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Styrene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Isopropylbenzene	U	5.00	35.4	5.95	U	6.58	U	6.58	U	6.41
1,1,2,2-Tetrachloroethane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
1,2,3-Trichloropropane	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
n-Propylbenzene	U	5.00	65.5	5.95	U	6.58	U	6.58	U	6.41
Bromobenzene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
1,3,5-Trimethylbenzene	U	5.00	126	5.95	U	6.58	U	6.58	U	6.41
2-Chlorotoluene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
4-Chlorotoluene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
tert-Butylbenzene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
1,2,4-Trimethylbenzene	U	5.00	230	5.95	U	6.58	U	6.58	U	6.41
sec-Butylbenzene	U	5.00	80.0	5.95	U	6.58	U	6.58	U	6.41
p-Isopropyltoluene	U	5.00	58.0	5.95	U	6.58	U	6.58	U	6.41
1,3-Dichlorobenzene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
1,4-Dichlorobenzene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
n-Butylbenzene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
1,2-Dichlorobenzene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
1,2-Dibromo-3-Chloropropane	U	20.0	U	23.8	U	26.3	U	26.3	U	25.6
1,2,4-Trichlorobenzene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Hexachlorobutadiene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41
Naphthalene	U	5.00	17.2	5.95	U	6.58	U	6.58	U	6.41
1,2,3-Trichlorobenzene	U	5.00	U	5.95	U	6.58	U	6.58	U	6.41

Table 1.1 Result of the Analysis for VOC in Soil
WA # 0-198 Vestal,

Method: REAC SOP 1807

Sample Number	Soil Blank C 040409-1	07637
Sample Location:		SB-124, 15'
Dilution Factor	1	1
Percent_Solids	100	77
File:	CV0829.D	CV0844.D

Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	5.00	U	6.49
Chloromethane	U	5.00	U	6.49
Vinyl Chloride	U	5.00	U	6.49
Bromomethane	U	5.00	U	6.49
Chloroethane	U	5.00	U	6.49
Trichlorofluoromethane	U	5.00	U	6.49
Acetone	U	20.0	10.8 J	26.0
1,1-Dichloroethene	U	5.00	U	6.49
Methylene Chloride	U	5.00	U	6.49
Carbon Disulfide	U	5.00	U	6.49
Methyl tert-Butyl Ether	U	5.00	U	6.49
trans-1,2-Dichloroethene	U	5.00	U	6.49
1,1-Dichloroethane	U	5.00	U	6.49
2-Butanone	U	5.00	U	6.49
2,2-Dichloropropane	U	5.00	U	6.49
cis-1,2-Dichloroethene	U	5.00	U	6.49
Chloroform	U	5.00	U	6.49
1,1-Dichloropropene	U	5.00	U	6.49
1,2-Dichloroethane	U	5.00	U	6.49
1,1,1-Trichloroethane	U	5.00	U	6.49
Carbon Tetrachloride	U	5.00	U	6.49
Benzene	U	5.00	U	6.49
Trichloroethene	U	5.00	U	6.49
1,2-Dichloropropane	U	5.00	U	6.49
Bromodichloromethane	U	5.00	U	6.49
Dibromomethane	U	5.00	U	6.49
cis-1,3-Dichloropropene	U	20.0	U	26.0
trans-1,3-Dichloropropene	U	20.0	U	26.0
1,1,2-Trichloroethane	U	5.00	U	6.49
1,3-Dichloropropane	U	5.00	U	6.49
Dibromochloromethane	U	20.0	U	26.0
1,2-Dibromoethane	U	5.00	U	6.49
Bromoform	U	5.00	U	6.49
4-Methyl-2-Pentanone	U	20.0	U	26.0
Toluene	U	5.00	U	6.49
2-Hexanone	U	20.0	U	26.0
Tetrachloroethene	U	5.00	U	6.49
Chlorobenzene	U	5.00	U	6.49
1,1,1,2-Tetrachloroethane	U	5.00	U	6.49
Ethylbenzene	U	5.00	U	6.49
p&m-Xylene	U	10.0	U	13.0
o-Xylene	U	5.00	U	6.49
Styrene	U	5.00	U	6.49
Isopropylbenzene	U	5.00	U	6.49
1,1,2,2-Tetrachloroethane	U	5.00	U	6.49
1,2,3-Trichloropropane	U	5.00	U	6.49
n-Propylbenzene	U	5.00	U	6.49
Bromobenzene	U	5.00	U	6.49
1,3,5-Trimethylbenzene	U	5.00	U	6.49
2-Chlorotoluene	U	5.00	U	6.49
4-Chlorotoluene	U	5.00	U	6.49
tert-Butylbenzene	U	5.00	U	6.49
1,2,4-Trimethylbenzene	U	5.00	U	6.49
sec-Butylbenzene	U	5.00	U	6.49
p-Isopropyltoluene	U	5.00	U	6.49
1,3-Dichlorobenzene	U	5.00	U	6.49
1,4-Dichlorobenzene	U	5.00	U	6.49
n-Butylbenzene	U	5.00	U	6.49
1,2-Dichlorobenzene	U	5.00	U	6.49
1,2-Dibromo-3-Chloropropane	U	20.0	U	26.0
1,2,4-Trichlorobenzene	U	5.00	U	6.49
Hexachlorobutadiene	U	5.00	U	6.49
Naphthalene	U	5.00	U	6.49
1,2,3-Trichlorobenzene	U	5.00	U	6.49

Table 1.1 Result of the Analysis for VOC in Soil
WA # 0-198 Vestal,

Method: REAC SOP 1807

Sample Number	Soil Blank C 041009-2		1011		1013		07646		07650	
	Sample Location:		SB-122, 25'		SB-123, 15'		SB-127, 20'		SB-127, 25'	
Dilution Factor	1		1		1		1		5	
Percent_Solids	100		75		75		79		78	
File:	CV1031.D		CV1033.D		CV1034.D		CV1035.D		CV1036.D	
Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Chloromethane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Vinyl Chloride	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Bromomethane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Chloroethane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Trichlorofluoromethane	U	5.00	U	6.67	8.07	6.67	U	6.33	U	32.1
Acetone	U	20.0	51.1	26.7	136	26.7	19.3 J	25.3	69.0 J	128
1,1-Dichloroethene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Methylene Chloride	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Carbon Disulfide	U	5.00	U	6.67	7.39	6.67	U	6.33	U	32.1
Methyl tert-Butyl Ether	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
trans-1,2-Dichloroethene	U	5.00	U	6.67	6.43 J	6.67	U	6.33	U	32.1
1,1 Dichloroethane	U	5.00	U	6.67	U	6.67	5.81 J	6.33	U	32.1
2-Butanone	U	5.00	13.7	6.67	45.3	6.67	4.10 J	6.33	U	32.1
2,2-Dichloropropane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
cis-1,2-Dichloroethene	U	5.00	123	6.67	65.7	6.67	U	6.33	99.6	32.1
Chloroform	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
1,1-Dichloropropene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
1,2-Dichloroethane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
1,1,1-Trichloroethane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Carbon Tetrachloride	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Benzene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Trichloroethene	U	5.00	U	6.67	127	6.67	U	6.33	U	32.1
1,2-Dichloropropane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Bromodichloromethane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Dibromomethane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
cis-1,3-Dichloropropene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
trans-1,3-Dichloropropene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
1,1,2-Trichloroethane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
1,3-Dichloropropane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Dibromochloromethane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
1,2-Dibromoethane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Bromoform	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
4-Methyl-2-Pentanone	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Toluene	U	5.00	U	6.67	2.48 J	6.67	35.3	6.33	21.9 J	32.1
2-Hexanone	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Tetrachloroethene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Chlorobenzene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
1,1,1,2-Tetrachloroethane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Ethylbenzene	U	5.00	U	6.67	2.08 J	6.67	4.77 J	6.33	29.5 J	32.1
p&m-Xylene	U	10.0	U	13.3	U	13.3	21.3	12.7	86.6	64.1
o-Xylene	U	5.00	U	6.67	1.80 J	6.67	18.6	6.33	36.1	32.1
Styrene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Isopropylbenzene	U	5.00	U	6.67	11.4	6.67	2.80 J	6.33	28.6 J	32.1
1,1,2,2-Tetrachloroethane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
1,2,3-Trichloropropane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
n-Propylbenzene	U	5.00	U	6.67	5.81 J	6.67	6.61	6.33	67.1	32.1
Bromobenzene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
1,3,5-Trimethylbenzene	U	5.00	U	6.67	U	6.67	23.9	6.33	285	32.1
2-Chlorotoluene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
4-Chlorotoluene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
tert-Butylbenzene	U	5.00	U	6.67	5.52 J	6.67	U	6.33	U	32.1
1,2,4-Trimethylbenzene	U	5.00	U	6.67	5.39 J	6.67	69.9	6.33	819	32.1
sec-Butylbenzene	U	5.00	U	6.67	10.3	6.67	3.04 J	6.33	19.0 J	32.1
p-Isopropyltoluene	U	5.00	U	6.67	1.92 J	6.67	14.9	6.33	173	32.1
1,3-Dichlorobenzene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
1,4-Dichlorobenzene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
n-Butylbenzene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
1,2-Dichlorobenzene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
1,2-Dibromo-3-Chloropropane	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
1,2,4-Trichlorobenzene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Hexachlorobutadiene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1
Naphthalene	U	5.00	U	6.67	3.65 J	6.67	4.09 J	6.33	264	32.1
1,2,3-Trichlorobenzene	U	5.00	U	6.67	U	6.67	U	6.33	U	32.1

Table 1.1 Result of the Analysis for VOC in Soil
WA # 0-198 Vestal,

Method: REAC SOP 1807

Sample Number	Soil Blank C 041009-2		07644		07641		07640		07638	
Sample Location:			SB-127, 10'		SB-126, 15'		SB-125, 20'		SB-124, 23'	
Dilution Factor	1		5		1		1		1	
Percent_Solids	100		84		80		79		76	
File:	CV1031.D		CV1037.D		CV1038.D		CV1039.D		CV1041.D	
Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Chloromethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Vinyl Chloride	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Bromomethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Chloroethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Trichlorofluoromethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Acetone	U	20.0	127	119	U	25.0	U	25.3	17.7	J 26.3
1,1-Dichloroethene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Methylene Chloride	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Carbon Disulfide	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Methyl tert-Butyl Ether	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
trans-1,2-Dichloroethene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,1 Dichloroethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
2-Butanone	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
2,2-Dichloropropane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
cis-1,2-Dichloroethene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Chloroform	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,1-Dichloropropene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,2-Dichloroethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,1,1-Trichloroethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Carbon Tetrachloride	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Benzene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Trichloroethene	U	5.00	U	29.8	U	6.25	5.20	J 6.33	6.66	6.58
1,2-Dichloropropane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Bromodichloromethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Dibromomethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
cis-1,3-Dichloropropene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
trans-1,3-Dichloropropene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,1,2-Trichloroethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,3-Dichloropropane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Dibromochloromethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,2-Dibromoethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Bromoform	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
4-Methyl-2-Pentanone	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Toluene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
2-Hexanone	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Tetrachloroethene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Chlorobenzene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,1,1,2-Tetrachloroethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Ethylbenzene	U	5.00	15.4	J 29.8	U	6.25	U	6.33	U	6.58
p&m-Xylene	U	10.0	369	59.5	U	12.5	U	12.7	U	13.2
o-Xylene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Styrene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Isopropylbenzene	U	5.00	123	29.8	U	6.25	U	6.33	U	6.58
1,1,2,2-Tetrachloroethane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,2,3-Trichloropropane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
n-Propylbenzene	U	5.00	328	29.8	U	6.25	U	6.33	U	6.58
Bromobenzene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,3,5-Trimethylbenzene	U	5.00	2170	298	U	6.25	U	6.33	U	6.58
2-Chlorotoluene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
4-Chlorotoluene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
tert-Butylbenzene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,2,4-Trimethylbenzene	U	5.00	3960	298	1.75	J 6.25	U	6.33	U	6.58
sec-Butylbenzene	U	5.00	250	29.8	U	6.25	U	6.33	U	6.58
p-Isopropyltoluene	U	5.00	768	29.8	U	6.25	U	6.33	U	6.58
1,3-Dichlorobenzene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,4-Dichlorobenzene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
n-Butylbenzene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,2-Dichlorobenzene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,2-Dibromo-3-Chloropropane	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,2,4-Trichlorobenzene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Hexachlorobutadiene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
Naphthalene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58
1,2,3-Trichlorobenzene	U	5.00	U	29.8	U	6.25	U	6.33	U	6.58

Table 1.1 Result of the Analysis for VOC in Soil
WA # 0-198 Vestal,

Method: REAC SOP 1807

Analyte	Soil Blank C 041009-2		07647		07639	
	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	5.00	U	67.6	U	6.17
Chloromethane	U	5.00	U	67.6	U	6.17
Vinyl Chloride	U	5.00	U	67.6	U	6.17
Bromomethane	U	5.00	U	67.6	U	6.17
Chloroethane	U	5.00	U	67.6	U	6.17
Trichlorofluoromethane	U	5.00	U	67.6	U	6.17
Acetone	U	20.0	120 J	270	U	24.7
1,1-Dichloroethene	U	5.00	U	67.6	U	6.17
Methylene Chloride	U	5.00	U	67.6	U	6.17
Carbon Disulfide	U	5.00	U	67.6	U	6.17
Methyl tert-Butyl Ether	U	5.00	U	67.6	U	6.17
trans-1,2-Dichloroethene	U	5.00	U	67.6	U	6.17
1,1 Dichloroethane	U	5.00	U	67.6	U	6.17
2-Butanone	U	5.00	U	67.6	U	6.17
2,2-Dichloropropane	U	5.00	U	67.6	U	6.17
cis-1,2-Dichloroethene	U	5.00	U	67.6	U	6.17
Chloroform	U	5.00	U	67.6	U	6.17
1,1-Dichloropropene	U	5.00	U	67.6	U	6.17
1,2-Dichloroethane	U	5.00	U	67.6	U	6.17
1,1,1-Trichloroethane	U	5.00	U	67.6	U	6.17
Carbon Tetrachloride	U	5.00	U	67.6	U	6.17
Benzene	U	5.00	U	67.6	U	6.17
Trichloroethene	U	5.00	U	67.6	U	6.17
1,2-Dichloropropane	U	5.00	U	67.6	U	6.17
Bromodichloromethane	U	5.00	U	67.6	U	6.17
Dibromomethane	U	5.00	U	67.6	U	6.17
cis-1,3-Dichloropropene	U	5.00	U	67.6	U	6.17
trans-1,3-Dichloropropene	U	5.00	U	67.6	U	6.17
1,1,2-Trichloroethane	U	5.00	U	67.6	U	6.17
1,3-Dichloropropane	U	5.00	U	67.6	U	6.17
Dibromochloromethane	U	5.00	U	67.6	U	6.17
1,2-Dibromoethane	U	5.00	U	67.6	U	6.17
Bromoform	U	5.00	U	67.6	U	6.17
4-Methyl-2-Pentanone	U	5.00	U	67.6	U	6.17
Toluene	U	5.00	345	67.6	U	6.17
2-Hexanone	U	5.00	U	67.6	U	6.17
Tetrachloroethene	U	5.00	U	67.6	U	6.17
Chlorobenzene	U	5.00	U	67.6	U	6.17
1,1,1,2-Tetrachloroethane	U	5.00	U	67.6	U	6.17
Ethylbenzene	U	5.00	116	67.6	U	6.17
p&m-Xylene	U	10.0	685	135	U	12.3
o-Xylene	U	5.00	547	67.6	U	6.17
Styrene	U	5.00	U	67.6	U	6.17
Isopropylbenzene	U	5.00	73.9	67.6	U	6.17
1,1,2,2-Tetrachloroethane	U	5.00	U	67.6	U	6.17
1,2,3-Trichloropropane	U	5.00	U	67.6	U	6.17
n-Propylbenzene	U	5.00	97.6	67.6	U	6.17
Bromobenzene	U	5.00	U	67.6	U	6.17
1,3,5-Trimethylbenzene	U	5.00	675	67.6	U	6.17
2-Chlorotoluene	U	5.00	U	67.6	U	6.17
4-Chlorotoluene	U	5.00	U	67.6	U	6.17
tert-Butylbenzene	U	5.00	U	67.6	U	6.17
1,2,4-Trimethylbenzene	U	5.00	1520	67.6	U	6.17
sec-Butylbenzene	U	5.00	24.2 J	67.6	U	6.17
p-Isopropyltoluene	U	5.00	53.4 J	67.6	U	6.17
1,3-Dichlorobenzene	U	5.00	U	67.6	U	6.17
1,4-Dichlorobenzene	U	5.00	U	67.6	U	6.17
n-Butylbenzene	U	5.00	U	67.6	U	6.17
1,2-Dichlorobenzene	U	5.00	U	67.6	U	6.17
1,2-Dibromo-3-Chloropropane	U	5.00	U	67.6	U	6.17
1,2,4-Trichlorobenzene	U	5.00	U	67.6	U	6.17
Hexachlorobutadiene	U	5.00	U	67.6	U	6.17
Naphthalene	U	5.00	121	67.6	U	6.17
1,2,3-Trichlorobenzene	U	5.00	U	67.6	U	6.17

Table 1.1 Result of the Analysis for VOC in Methanol
WA # 0-198 Vestal.

Method: REAC SOP 1807

Sample Number	MeOH Blank B 040909-1	07645	07642
Sample Location:		SB-127, 11.5'	SB-127, 6.5'
Dilution Factor	50	50	100
Percent_Solids	100	84	79
File:	BV0361.D	BV0365.D	BV0366.D

Analyte	Result		Result		Result	
	µg/Kg	RL µg/Kg	µg/Kg	RL µg/Kg	µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	250	U	298	U	633
Chloromethane	U	250	U	298	U	633
Vinyl Chloride	U	250	U	298	U	633
Bromomethane	U	250	U	298	U	633
Chloroethane	U	250	U	298	U	633
Trichlorofluoromethane	U	250	U	298	U	633
Acetone	U	1000	U	1190	U	2530
1,1-Dichloroethene	U	250	U	298	U	633
Methylene Chloride	U	250	U	298	U	633
Carbon Disulfide	U	250	U	298	U	633
Methyl tert-Butyl Ether	U	250	U	298	U	633
trans-1,2-Dichloroethene	U	250	U	298	U	633
1,1 Dichloroethane	U	250	U	298	U	633
2-Butanone	U	250	U	298	U	633
2,2-Dichloropropane	U	250	U	298	U	633
cis-1,2-Dichloroethene	U	250	U	298	U	633
Chloroform	U	250	U	298	U	633
1,1-Dichloropropene	U	250	U	298	U	633
1,2-Dichloroethane	U	250	U	298	U	633
1,1,1-Trichloroethane	U	250	U	298	U	633
Carbon Tetrachloride	U	250	U	298	U	633
Benzene	U	250	U	298	U	633
Trichloroethene	U	250	U	298	U	633
1,2-Dichloropropane	U	250	U	298	U	633
Bromodichloromethane	U	250	U	298	U	633
Dibromomethane	U	250	U	298	U	633
cis-1,3-Dichloropropene	U	250	U	298	U	633
trans-1,3-Dichloropropene	U	250	U	298	U	633
1,1,2-Trichloroethane	U	250	U	298	U	633
1,3-Dichloropropane	U	250	U	298	U	633
Dibromochloromethane	U	250	U	298	U	633
1,2-Dibromoethane	U	250	U	298	U	633
Bromoform	U	250	U	298	U	633
4-Methyl-2-Pentanone	U	250	U	298	U	633
Toluene	U	250	U	298	161 J	633
2-Hexanone	U	250	U	298	U	633
Tetrachloroethene	U	250	U	298	U	633
Chlorobenzene	U	250	U	298	U	633
1,1,1,2-Tetrachloroethane	U	250	U	298	U	633
Ethylbenzene	U	250	U	298	1670	633
p&m-Xylene	U	500	210 J	595	11200	1270
o-Xylene	U	250	U	298	2830	633
Styrene	U	250	U	298	U	633
Isopropylbenzene	U	250	U	298	2310	633
1,1,2,2-Tetrachloroethane	U	250	U	298	U	633
1,2,3-Trichloropropane	U	250	U	298	U	633
n-Propylbenzene	U	250	104 J	298	4510	633
Bromobenzene	U	250	U	298	U	633
1,3,5-Trimethylbenzene	U	250	413	298	21300	633
2-Chlorotoluene	U	250	U	298	U	633
4-Chlorotoluene	U	250	U	298	U	633
tert-Butylbenzene	U	250	U	298	U	633
1,2,4-Trimethylbenzene	U	250	930	298	40000	3160
sec-Butylbenzene	U	250	U	298	5020	633
p-Isopropyltoluene	U	250	187 J	298	7470	633
1,3-Dichlorobenzene	U	250	U	298	U	633
1,4-Dichlorobenzene	U	250	U	298	U	633
n-Butylbenzene	U	250	U	298	U	633
1,2-Dichlorobenzene	U	250	U	298	U	633
1,2-Dibromo-3-Chloropropane	U	250	U	298	U	633
1,2,4-Trichlorobenzene	5.75	250	U	298	U	633
Hexachlorobutadiene	U	250	U	298	U	633
Naphthalene	4.34 J	250	344 B	298	5740 B	633
1,2,3-Trichlorobenzene	5.48	250	U	298	U	633

Table 1.1 Result of the Analysis for VOC in Methanol
WA # 0-198 Vestal,

Method: REAC SOP 1807

Sample Number	MeOH Blank C 040909-1	1003
Sample Location:		SB-120, 15'
Dilution Factor	50	1000
Percent_Solids	100	83
File:	CV0988.D	CV1005.D

Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	250	U	6020
Chloromethane	U	250	U	6020
Vinyl Chloride	U	250	U	6020
Bromomethane	U	250	U	6020
Chloroethane	U	250	U	6020
Trichlorofluoromethane	U	250	U	6020
Acetone	U	1000	U	24100
1,1-Dichloroethene	U	250	U	6020
Methylene Chloride	U	250	U	6020
Carbon Disulfide	U	250	U	6020
Methyl tert-Butyl Ether	U	250	U	6020
trans-1,2-Dichloroethene	U	250	U	6020
1,1-Dichloroethane	U	250	U	6020
2-Butanone	U	250	U	6020
2,2-Dichloropropane	U	250	U	6020
cis-1,2-Dichloroethene	U	250	U	6020
Chloroform	U	250	U	6020
1,1-Dichloropropene	U	250	U	6020
1,2-Dichloroethane	U	250	U	6020
1,1,1-Trichloroethane	U	250	U	6020
Carbon Tetrachloride	U	250	U	6020
Benzene	U	250	U	6020
Trichloroethene	U	250	U	6020
1,2-Dichloropropane	U	250	U	6020
Bromodichloromethane	U	250	U	6020
Dibromomethane	U	250	U	6020
cis-1,3-Dichloropropene	U	250	U	6020
trans-1,3-Dichloropropene	U	250	U	6020
1,1,2-Trichloroethane	U	250	U	6020
1,3-Dichloropropane	U	250	U	6020
Dibromochloromethane	U	250	U	6020
1,2-Dibromoethane	U	250	U	6020
Bromoform	U	250	U	6020
4-Methyl-2-Pentanone	U	250	U	6020
Toluene	U	250	U	6020
2-Hexanone	U	250	U	6020
Tetrachloroethene	U	250	U	6020
Chlorobenzene	U	250	U	6020
1,1,1,2-Tetrachloroethane	U	250	U	6020
Ethylbenzene	U	250	U	6020
p&m-Xylene	U	500	U	12000
o-Xylene	U	250	U	6020
Styrene	U	250	U	6020
Isopropylbenzene	U	250	3830 J	6020
1,1,2,2-Tetrachloroethane	U	250	U	6020
1,2,3-Trichloropropane	U	250	U	6020
n-Propylbenzene	U	250	9410	6020
Bromobenzene	U	250	U	6020
1,3,5-Trimethylbenzene	U	250	23600	6020
2-Chlorotoluene	U	250	U	6020
4-Chlorotoluene	U	250	U	6020
tert-Butylbenzene	U	250	U	6020
1,2,4-Trimethylbenzene	U	250	73000	6020
sec-Butylbenzene	U	250	7610	6020
p-Isopropyltoluene	U	250	9940	6020
1,3-Dichlorobenzene	U	250	U	6020
1,4-Dichlorobenzene	U	250	U	6020
n-Butylbenzene	U	250	U	6020
1,2-Dichlorobenzene	U	250	U	6020
1,2-Dibromo-3-Chloropropane	U	250	U	6020
1,2,4-Trichlorobenzene	U	250	U	6020
Hexachlorobutadiene	U	250	U	6020
Naphthalene	U	250	4510 J	6020
1,2,3-Trichlorobenzene	U	250	U	6020

Table 1.1 Result of the Analysis for VOC in Water
WA # 0-198 Vestal,

Method: REAC SOP 1806

Sample Number	Water Blank C 040709-1		R904004-25		R904004-23		R904004-21		R904004-27	
Sample Location:			TB-0331		ERT-1D		ERT-3S		ERT-3I	
Dilution Factor	1		1		1		1000		50	
File:	CV0934.D		CV0936.D		CV0937.D		CV0938.D		CV0942.D	
Analyte	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Dichlorodifluoromethane	U	5.00	U	5.00	U	5.00	U	5000	U	250
Chloromethane	U	5.00	U	5.00	U	5.00	U	5000	U	250
Vinyl Chloride	U	5.00	U	5.00	U	5.00	U	5000	U	250
Bromomethane	U	5.00	U	5.00	U	5.00	U	5000	U	250
Chloroethane	U	5.00	U	5.00	U	5.00	U	5000	U	250
Trichlorofluoromethane	U	5.00	U	5.00	U	5.00	U	5000	U	250
Acetone	U	20.0	U	20.0	U	20.0	U	20000	U	1000
1,1-Dichloroethene	U	5.00	U	5.00	U	5.00	12400	5000	414	250
Methylene Chloride	U	5.00	U	5.00	U	5.00	U	5000	U	250
Carbon Disulfide	U	20.0	U	20.0	U	20.0	U	20000	U	1000
Methyl tert-Butyl Ether	U	5.00	U	5.00	U	5.00	U	5000	U	250
trans-1,2-Dichloroethene	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,1 Dichloroethane	U	5.00	U	5.00	U	5.00	U	5000	94.0	250
2-Butanone	U	5.00	U	5.00	U	5.00	U	5000	U	250
2,2-Dichloropropane	U	5.00	U	5.00	U	5.00	U	5000	U	250
cis-1,2-Dichloroethene	U	5.00	U	5.00	3.62	5.00	U	5000	U	250
Chloroform	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,1-Dichloropropene	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,2-Dichloroethane	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,1,1-Trichloroethane	U	5.00	U	5.00	U	5.00	65300	5000	1980	250
Carbon Tetrachloride	U	5.00	U	5.00	U	5.00	U	5000	U	250
Benzene	U	5.00	U	5.00	U	5.00	U	5000	U	250
Trichloroethene	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,2-Dichloropropane	U	5.00	U	5.00	U	5.00	U	5000	U	250
Bromodichloromethane	U	5.00	U	5.00	U	5.00	U	5000	U	250
Dibromomethane	U	5.00	U	5.00	U	5.00	U	5000	U	250
cis-1,3-Dichloropropene	U	5.00	U	5.00	U	5.00	U	5000	U	250
trans-1,3-Dichloropropene	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,1,2-Trichloroethane	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,3-Dichloropropane	U	5.00	U	5.00	U	5.00	U	5000	U	250
Dibromochloromethane	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,2-Dibromoethane	U	5.00	U	5.00	U	5.00	U	5000	U	250
Bromoform	U	5.00	U	5.00	U	5.00	U	5000	U	250
4-Methyl-2-Pentanone	U	20.0	U	20.0	U	20.0	U	20000	U	1000
Toluene	U	5.00	U	5.00	U	5.00	U	5000	U	250
2-Hexanone	U	20.0	U	20.0	U	20.0	U	20000	U	1000
Tetrachloroethene	U	5.00	U	5.00	U	5.00	U	5000	U	250
Chlorobenzene	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,1,1,2-Tetrachloroethane	U	20.0	U	20.0	U	20.0	U	20000	U	1000
Ethylbenzene	U	5.00	U	5.00	U	5.00	U	5000	U	250
p&m-Xylene	U	10.0	U	10.0	U	10.0	U	10000	U	500
o-Xylene	U	5.00	U	5.00	U	5.00	U	5000	U	250
Styrene	U	20.0	U	20.0	U	20.0	U	20000	U	1000
Isopropylbenzene	U	20.0	U	20.0	U	20.0	U	20000	U	1000
1,1,2,2-Tetrachloroethane	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,2,3-Trichloropropane	U	5.00	U	5.00	U	5.00	U	5000	U	250
n-Propylbenzene	U	5.00	U	5.00	U	5.00	U	5000	U	250
Bromobenzene	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,3,5-Trimethylbenzene	U	20.0	U	20.0	U	20.0	U	20000	U	1000
2-Chlorotoluene	U	5.00	U	5.00	U	5.00	U	5000	U	250
4-Chlorotoluene	U	5.00	U	5.00	U	5.00	U	5000	U	250
tert-Butylbenzene	U	20.0	U	20.0	U	20.0	U	20000	U	1000
1,2,4-Trimethylbenzene	U	20.0	U	20.0	U	20.0	U	20000	U	1000
sec-Butylbenzene	U	20.0	U	20.0	U	20.0	U	20000	U	1000
p-isopropyltoluene	U	20.0	U	20.0	U	20.0	U	20000	U	1000
1,3-Dichlorobenzene	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,4-Dichlorobenzene	U	5.00	U	5.00	U	5.00	U	5000	U	250
n-Butylbenzene	U	20.0	U	20.0	U	20.0	U	20000	U	1000
1,2-Dichlorobenzene	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,2-Dibromo-3-Chloropropane	U	5.00	U	5.00	U	5.00	U	5000	U	250
1,2,4-Trichlorobenzene	U	5.00	U	5.00	U	5.00	U	5000	U	250
Hexachlorobutadiene	U	5.00	U	5.00	U	5.00	U	5000	U	250
Naphthalene	U	20.0	U	20.0	U	20.0	U	20000	U	1000
1,2,3-Trichlorobenzene	U	5.00	U	5.00	U	5.00	U	5000	U	250

Table 1.1 Result of the Analysis for VOC in Water
WA # 0-198 Vestal,

Method: REAC SOP 1806

Sample Number	Water Blank C 040909-1		R904004-13		R904004-14		R904004-15		R904004-16	
	1		ERT-4S		ERT-4D		ERT-2I		ERT-3I dup	
Sample Location:	1		2500		50		10		25	
Dilution Factor	CV0987.D		CV0988.D		CV0989.D		CV0990.D		CV0991.D	
File:	CV0987.D		CV0988.D		CV0989.D		CV0990.D		CV0991.D	
Analyte	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Dichlorodifluoromethane	U	5.00	U	12500	U	250	U	50.0	U	125
Chloromethane	U	5.00	U	12500	U	250	U	50.0	U	125
Vinyl Chloride	U	5.00	U	12500	U	250	U	50.0	U	125
Bromomethane	U	5.00	U	12500	U	250	U	50.0	U	125
Chloroethane	U	5.00	U	12500	U	250	U	50.0	U	125
Trichlorofluoromethane	U	5.00	U	12500	U	250	U	50.0	U	125
Acetone	U	20.0	U	50000	U	1000	U	200	U	500
1,1-Dichloroethene	U	5.00	45300	12500	205 J	250	56.4	50.0	337	125
Methylene Chloride	U	5.00	U	12500	U	250	U	50.0	U	125
Carbon Disulfide	U	5.00	U	12500	U	250	U	50.0	U	125
Methyl tert-Butyl Ether	U	5.00	U	12500	U	250	U	50.0	U	125
trans-1,2-Dichloroethene	U	5.00	U	12500	U	250	U	50.0	U	125
1,1 Dichloroethane	U	5.00	U	12500	131 J	250	19.2 J	50.0	94.5 J	125
2-Butanone	U	5.00	U	12500	U	250	U	50.0	U	125
2,2-Dichloropropane	U	5.00	U	12500	U	250	U	50.0	U	125
cis-1,2-Dichloroethene	U	5.00	U	12500	U	250	U	50.0	U	125
Chloroform	U	5.00	U	12500	U	250	U	50.0	U	125
1,1-Dichloropropene	U	5.00	U	12500	U	250	U	50.0	U	125
1,2-Dichloroethane	U	5.00	U	12500	U	250	U	50.0	U	125
1,1,1-Trichloroethane	U	5.00	337000	12500	1270	250	341	50.0	2230	125
Carbon Tetrachloride	U	5.00	U	12500	U	250	U	50.0	U	125
Benzene	U	5.00	U	12500	U	250	U	50.0	U	125
Trichloroethene	U	5.00	497000	12500	U	250	U	50.0	U	125
1,2-Dichloropropane	U	5.00	U	12500	U	250	U	50.0	U	125
Bromodichloromethane	U	5.00	U	12500	U	250	U	50.0	U	125
Dibromomethane	U	5.00	U	12500	U	250	U	50.0	U	125
cis-1,3-Dichloropropene	U	5.00	U	12500	U	250	U	50.0	U	125
trans-1,3-Dichloropropene	U	5.00	U	12500	U	250	U	50.0	U	125
1,1,2-Trichloroethane	U	5.00	U	12500	U	250	U	50.0	U	125
1,3-Dichloropropane	U	5.00	U	12500	U	250	U	50.0	U	125
Dibromochloromethane	U	5.00	U	12500	U	250	U	50.0	U	125
1,2-Dibromoethane	U	5.00	U	12500	U	250	U	50.0	U	125
Bromoform	U	5.00	U	12500	U	250	U	50.0	U	125
4-Methyl-2-Pentanone	U	5.00	U	12500	U	250	U	50.0	U	125
Toluene	U	5.00	U	12500	U	250	U	50.0	U	125
2-Hexanone	U	5.00	U	12500	U	250	U	50.0	U	125
Tetrachloroethene	U	5.00	U	12500	U	250	U	50.0	U	125
Chlorobenzene	U	5.00	U	12500	U	250	U	50.0	U	125
1,1,1,2-Tetrachloroethane	U	5.00	U	12500	U	250	U	50.0	U	125
Ethylbenzene	U	5.00	U	12500	U	250	U	50.0	U	125
p&m-Xylene	U	10.0	U	25000	U	500	U	100	U	250
o-Xylene	U	5.00	U	12500	U	250	U	50.0	U	125
Styrene	U	5.00	U	12500	U	250	U	50.0	U	125
Isopropylbenzene	U	5.00	U	12500	U	250	U	50.0	U	125
1,1,2,2-Tetrachloroethane	U	5.00	U	12500	U	250	U	50.0	U	125
1,2,3-Trichloropropane	U	5.00	U	12500	U	250	U	50.0	U	125
n-Propylbenzene	U	5.00	U	12500	U	250	U	50.0	U	125
Bromobenzene	U	5.00	U	12500	U	250	U	50.0	U	125
1,3,5-Trimethylbenzene	U	5.00	U	12500	U	250	U	50.0	U	125
2-Chlorotoluene	U	5.00	U	12500	U	250	U	50.0	U	125
4-Chlorotoluene	U	5.00	U	12500	U	250	U	50.0	U	125
tert-Butylbenzene	U	5.00	U	12500	U	250	U	50.0	U	125
1,2,4-Trimethylbenzene	U	5.00	U	12500	U	250	U	50.0	U	125
sec-Butylbenzene	U	5.00	U	12500	U	250	U	50.0	U	125
p-Isopropyltoluene	U	5.00	U	12500	U	250	U	50.0	U	125
1,3-Dichlorobenzene	U	5.00	U	12500	U	250	U	50.0	U	125
1,4-Dichlorobenzene	U	5.00	U	12500	U	250	U	50.0	U	125
n-Butylbenzene	U	5.00	U	12500	U	250	U	50.0	U	125
1,2-Dichlorobenzene	U	5.00	U	12500	U	250	U	50.0	U	125
1,2-Dibromo-3-Chloropropane	U	5.00	U	12500	U	250	U	50.0	U	125
1,2,4-Trichlorobenzene	U	5.00	U	12500	U	250	U	50.0	U	125
Hexachlorobutadiene	U	5.00	U	12500	U	250	U	50.0	U	125
Naphthalene	U	5.00	U	12500	U	250	U	50.0	U	125
1,2,3-Trichlorobenzene	U	5.00	U	12500	U	250	U	50.0	U	125

** Samples analyzed out of Holding time

Table 1.1 Result of the Analysis for VOC in Water
WA # 0-198 Vestal,

Method: REAC SOP 1806

Sample Number	Water Blank C 040909-1	R904004-17	R904004-18	R904004-19	R904004-20
Sample Location:		ERT-4S	ERT-1I	ERT-4I	ERT-3D
Dilution Factor	1	2000	50	50	1
File:	CV0987.D	CV0992.D	CV0993.D	CV0994.D	CV0995.D

Analyte	Water Blank C 040909-1		R904004-17		R904004-18		R904004-19		R904004-20	
	Result µg/L	RL µg/L	Result µg/L	RL µg/L	Result µg/L	RL µg/L	Result µg/L	RL µg/L	Result µg/L	RL µg/L
Dichlorodifluoromethane	U	5.00	U	10000	U	250	U	250	U	5.00
Chloromethane	U	5.00	U	10000	U	250	U	250	U	5.00
Vinyl Chloride	U	5.00	U	10000	97.0 J	250	U	250	U	5.00
Bromomethane	U	5.00	U	10000	U	250	U	250	U	5.00
Chloroethane	U	5.00	U	10000	U	250	U	250	U	5.00
Trichlorofluoromethane	U	5.00	U	10000	U	250	U	250	U	5.00
Acetone	U	20.0	U	40000	U	1000	U	1000	U	5.00
1,1-Dichloroethene	U	5.00	3280 J	10000	U	250	497	250	9.45	5.00
Methylene Chloride	U	5.00	U	10000	U	250	U	250	U	5.00
Carbon Disulfide	U	5.00	U	10000	U	250	U	250	U	5.00
Methyl tert-Butyl Ether	U	5.00	U	10000	U	250	U	250	U	5.00
trans-1,2-Dichloroethene	U	5.00	U	10000	U	250	U	250	U	5.00
1,1 Dichloroethane	U	5.00	U	10000	U	250	127 J	250	78.1	5.00
2-Butanone	U	5.00	U	10000	U	250	U	250	U	5.00
2,2-Dichloropropane	U	5.00	U	10000	U	250	U	250	U	5.00
cis-1,2-Dichloroethene	U	5.00	575000 E	10000	2280	250	U	250	U	5.00
Chloroform	U	5.00	U	10000	U	250	U	250	U	5.00
1,1-Dichloropropene	U	5.00	U	10000	U	250	U	250	U	5.00
1,2-Dichloroethane	U	5.00	U	10000	U	250	U	250	U	5.00
1,1,1-Trichloroethane	U	5.00	17800	10000	U	250	3390	250	62.0	5.00
Carbon Tetrachloride	U	5.00	U	10000	U	250	U	250	U	5.00
Benzene	U	5.00	U	10000	U	250	U	250	U	5.00
Trichloroethene	U	5.00	44300	10000	1390	250	U	250	U	5.00
1,2-Dichloropropane	U	5.00	U	10000	U	250	U	250	U	5.00
Bromodichloromethane	U	5.00	U	10000	U	250	U	250	U	5.00
Dibromomethane	U	5.00	U	10000	U	250	U	250	U	5.00
cis-1,3-Dichloropropene	U	5.00	U	10000	U	250	U	250	U	5.00
trans-1,3-Dichloropropene	U	5.00	U	10000	U	250	U	250	U	5.00
1,1,2-Trichloroethane	U	5.00	U	10000	U	250	U	250	U	5.00
1,3-Dichloropropane	U	5.00	U	10000	U	250	U	250	U	5.00
Dibromochloromethane	U	5.00	U	10000	U	250	U	250	U	5.00
1,2-Dibromoethane	U	5.00	U	10000	U	250	U	250	U	5.00
Bromoform	U	5.00	U	10000	U	250	U	250	U	5.00
4-Methyl-2-Pentanone	U	5.00	U	10000	U	250	U	250	U	5.00
Toluene	U	5.00	U	10000	U	250	U	250	U	5.00
2-Hexanone	U	5.00	U	10000	U	250	U	250	U	5.00
Tetrachloroethene	U	5.00	U	10000	U	250	U	250	U	5.00
Chlorobenzene	U	5.00	U	10000	U	250	U	250	U	5.00
1,1,1,2-Tetrachloroethane	U	5.00	U	10000	U	250	U	250	U	5.00
Ethylbenzene	U	5.00	U	10000	U	250	U	250	U	5.00
p&m-Xylene	U	10.0	U	20000	U	500	U	500	U	10.0
o-Xylene	U	5.00	U	10000	U	250	U	250	U	5.00
Styrene	U	5.00	U	10000	U	250	U	250	U	5.00
Isopropylbenzene	U	5.00	U	10000	U	250	U	250	U	5.00
1,1,2,2-Tetrachloroethane	U	5.00	U	10000	U	250	U	250	U	5.00
1,2,3-Trichloropropane	U	5.00	U	10000	U	250	U	250	U	5.00
n-Propylbenzene	U	5.00	U	10000	U	250	U	250	U	5.00
Bromobenzene	U	5.00	U	10000	U	250	U	250	U	5.00
1,3,5-Trimethylbenzene	U	5.00	U	10000	U	250	U	250	U	5.00
2-Chlorotoluene	U	5.00	U	10000	U	250	U	250	U	5.00
4-Chlorotoluene	U	5.00	U	10000	U	250	U	250	U	5.00
tert-Butylbenzene	U	5.00	U	10000	U	250	U	250	U	5.00
1,2,4-Trimethylbenzene	U	5.00	U	10000	U	250	U	250	U	5.00
sec-Butylbenzene	U	5.00	U	10000	U	250	U	250	U	5.00
p-Isopropyltoluene	U	5.00	U	10000	U	250	U	250	U	5.00
1,3-Dichlorobenzene	U	5.00	U	10000	U	250	U	250	U	5.00
1,4-Dichlorobenzene	U	5.00	U	10000	U	250	U	250	U	5.00
n-Butylbenzene	U	5.00	U	10000	U	250	U	250	U	5.00
1,2-Dichlorobenzene	U	5.00	U	10000	U	250	U	250	U	5.00
1,2-Dibromo-3-Chloropropane	U	5.00	U	10000	U	250	U	250	U	5.00
1,2,4-Trichlorobenzene	U	5.00	U	10000	U	250	U	250	U	5.00
Hexachlorobutadiene	U	5.00	U	10000	U	250	U	250	U	5.00
Naphthalene	U	5.00	U	10000	U	250	U	250	U	5.00
1,2,3-Trichlorobenzene	U	5.00	U	10000	U	250	U	250	U	5.00

** Samples analyzed out of Holding time

Table 1.1 Result of the Analysis for VOC in Water
WA # 0-198 Vestal,

Method: REAC SOP 1806

Sample Number	Water Blank C 040909-1		R904004-22		R904004-24		R904004-26	
	1		50		50		25	
Sample Location:			ERT-2D		ERT-2D dup		ERT-2S	
Dilution Factor			50		50		25	
File:	CV0987.D		CV0998.D		CV0999.D		CV1000.D	
Analyte	Result	RL	Result	RL	Result	RL	Result	RL
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Dichlorodifluoromethane	U	5.00	U	250	U	250	U	125
Chloromethane	U	5.00	U	250	U	250	U	125
Vinyl Chloride	U	5.00	U	250	U	250	U	125
Bromomethane	U	5.00	U	250	U	250	U	125
Chloroethane	U	5.00	U	250	U	250	U	125
Trichlorofluoromethane	U	5.00	U	250	U	250	U	125
Acetone	U	20.0	U	1000	U	1000	U	500
1,1-Dichloroethene	U	5.00	378	250	360	250	306	125
Methylene Chloride	U	5.00	U	250	U	250	U	125
Carbon Disulfide	U	5.00	U	250	U	250	U	125
Methyl tert-Butyl Ether	U	5.00	U	250	U	250	U	125
trans-1,2-Dichloroethene	U	5.00	U	250	U	250	U	125
1,1 Dichloroethane	U	5.00	348	250	354	250	101	125
2-Butanone	U	5.00	U	250	U	250	U	125
2,2-Dichloropropane	U	5.00	U	250	U	250	U	125
cis-1,2-Dichloroethene	U	5.00	U	250	U	250	U	125
Chloroform	U	5.00	U	250	U	250	U	125
1,1-Dichloropropene	U	5.00	U	250	U	250	U	125
1,2-Dichloroethane	U	5.00	U	250	U	250	U	125
1,1,1-Trichloroethane	U	5.00	2300	250	2280	250	1620	125
Carbon Tetrachloride	U	5.00	U	250	U	250	U	125
Benzene	U	5.00	U	250	U	250	U	125
Trichloroethene	U	5.00	U	250	U	250	U	125
1,2-Dichloropropane	U	5.00	U	250	U	250	U	125
Bromodichloromethane	U	5.00	U	250	U	250	U	125
Dibromomethane	U	5.00	U	250	U	250	U	125
cis-1,3-Dichloropropene	U	5.00	U	250	U	250	U	125
trans-1,3-Dichloropropene	U	5.00	U	250	U	250	U	125
1,1,2-Trichloroethane	U	5.00	U	250	U	250	U	125
1,3-Dichloropropane	U	5.00	U	250	U	250	U	125
Dibromochloromethane	U	5.00	U	250	U	250	U	125
1,2-Dibromoethane	U	5.00	U	250	U	250	U	125
Bromoform	U	5.00	U	250	U	250	U	125
4-Methyl-2-Pentanone	U	5.00	U	250	U	250	U	125
Toluene	U	5.00	U	250	U	250	U	125
2-Hexanone	U	5.00	U	250	U	250	U	125
Tetrachloroethene	U	5.00	U	250	U	250	U	125
Chlorobenzene	U	5.00	U	250	U	250	U	125
1,1,1,2-Tetrachloroethane	U	5.00	U	250	U	250	U	125
Ethylbenzene	U	5.00	U	250	U	250	U	125
p&m-Xylene	U	10.0	U	500	U	500	U	250
o-Xylene	U	5.00	U	250	U	250	U	125
Styrene	U	5.00	U	250	U	250	U	125
Isopropylbenzene	U	5.00	U	250	U	250	U	125
1,1,2,2-Tetrachloroethane	U	5.00	U	250	U	250	U	125
1,2,3-Trichloropropane	U	5.00	U	250	U	250	U	125
n-Propylbenzene	U	5.00	U	250	U	250	U	125
Bromobenzene	U	5.00	U	250	U	250	U	125
1,3,5-Trimethylbenzene	U	5.00	U	250	U	250	U	125
2-Chlorotoluene	U	5.00	U	250	U	250	U	125
4-Chlorotoluene	U	5.00	U	250	U	250	U	125
tert-Butylbenzene	U	5.00	U	250	U	250	U	125
1,2,4-Trimethylbenzene	U	5.00	U	250	U	250	U	125
sec-Butylbenzene	U	5.00	U	250	U	250	U	125
p-Isopropyltoluene	U	5.00	U	250	U	250	U	125
1,3-Dichlorobenzene	U	5.00	U	250	U	250	U	125
1,4-Dichlorobenzene	U	5.00	U	250	U	250	U	125
n-Butylbenzene	U	5.00	U	250	U	250	U	125
1,2-Dichlorobenzene	U	5.00	U	250	U	250	U	125
1,2-Dibromo-3-Chloropropane	U	5.00	U	250	U	250	U	125
1,2,4-Trichlorobenzene	U	5.00	U	250	U	250	U	125
Hexachlorobutadiene	U	5.00	U	250	U	250	U	125
Naphthalene	U	5.00	U	250	U	250	U	125
1,2,3-Trichlorobenzene	U	5.00	U	250	U	250	U	125

** Samples analyzed out of Holding time

REAC, Edison, NJ
 (732) 321-4200
 EPA CONTRACT EP-C-04-032

CHAIN OF CUSTODY RECORD

Project Name: Vestal
 Project Number: 0-198
 LM Contact: K. Woodruff Phone: 609-865-9317

0198-033009-50

No: 40509 (14)
 Sheet 01 of 01 (Do not copy)
 (for addnl. samples use new form)

WO# R904002

Sample Identification

Analyses Requested

REAC#	Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	VOCs							
01	1001	SB-120, 5'	S	3/30/09	1	3oz glass, 4°C	X							
02	1002	SB-120, 10'			1		X							
03	1003	SB-120, 15'			1		X							
04	1004	SB-120, 20'			1		X							
05	1005	SB-120, 24'			1		X							
06	1006	SB-121, 18'			1		X							
07	1007	SB-121, 19'			1		X							
08	1008	SB-121, 25'			1		X							
09	1009	SB-122, 18'			1		X							
10	1010	SB-122, 20'			1		X							
11	1011	SB-122, 25'			1		X							
12	1012	SB-123, 10'			1		X							
13	1013	SB-123, 15'			1		X							
14	1014	SB-123, 20'			1		X							
15	1015	SB-123, 24'			1		X							

Matrix:

- A- Air
- AT- Animal Tissue
- DL- Drum Liquids
- DS- Drum Solids
- GW- Groundwater
- O- Oil
- PR- Product
- PT- Plant Tissue
- PW- Potable Water
- S- Soil
- SD- Sediment
- SL- Sludge
- SW- Surface Water
- TX- TCLP Extract
- W- Water
- X- Other

Special Instructions:

**SAMPLES TRANSFERRED FROM
 CHAIN OF CUSTODY #:**

Received 2°C JM 4/11/09

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished by	Date	Received by	Date	Time
all analyses	K. Woodruff	3/31/09	Jerry Patton	4/11/09	9:45	All Analyses	Jerry Patton	4/11/09	[Signature]	4/11/09	10:30

REAC, Edison, NJ

(732) 321-4200

EPA Contract ~~68-C99-223~~

EP-C-04-032

CHAIN OF CUSTODY RECORD

Project Name: Vastal Chlorinate Hydrocarbons

Project Number: 0-198

LM Contact: H. Wiedrich Phone: 609 865-9317

0198-033109-51

No: 02185
Sheet 01 of 01 (Do not copy)
(for addnl. samples use new form)

WO# R904004

Sample Identification

Analyses Requested

REAC#	Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	LOCC											
01	07646	SB-127, 20'	S	3/31/09	1	8 oz glass / 4°C	X											
02	07645	SB-127, 16.5'			1		X											
03	07650	SB-127, 25'			1		X											
04	07644	SB-127, 10'			1		X											
05	07647	SB-127, 15'			1		X											
06	07641	SB-126, 15'			1		X											
07	07643	SB-126, 16.5'			1		X											
08	07642	SB-127, 6.5'			1		X											
09	07637	SB-124, 15'			1		X											
10	07640	SB-125, 20'			1		X											
11	07639	SB-125, 15'			1		X											
12	07638	SB-124, 28'			1		X											

Matrix:

Special Instructions:

- A- Air
- AT- Animal Tissue
- DL- Drum Liquids
- DS- Drum Solids
- GW- Groundwater
- O- Oil
- PR- Product
- PT- Plant Tissue
- PW- Potable Water
- S- Soil
- SD- Sediment
- SL- Sludge
- SW- Surface Water
- TX- TCLP Extract
- W- Water
- X- Other

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #:

Received GOC 4/1/09

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished by	Date	Received by	Date	Time
All analyses	<u>[Signature]</u>	4/1/09	<u>[Signature]</u>	4/1/09	9:16						
All analyses	<u>[Signature]</u>	4/1/09	<u>[Signature]</u>	4/1/09	13:25						
All analyses	<u>[Signature]</u>	4/1/09	<u>[Signature]</u>	4/1/09	15:15						

REAC, Edison, NJ

(732) 321-4200

EPA Contract ~~68-099-223~~

EP-C-04-032

CHAIN OF CUSTODY RECORD

Project Name: Vestal Chlorinated Hydrocarbons

Project Number: 0-198

LM Contact: R Woodruff Phone: 609 865-9317

C198-033109-52

No: 02184

Sheet 01 of 01 (Do not copy)

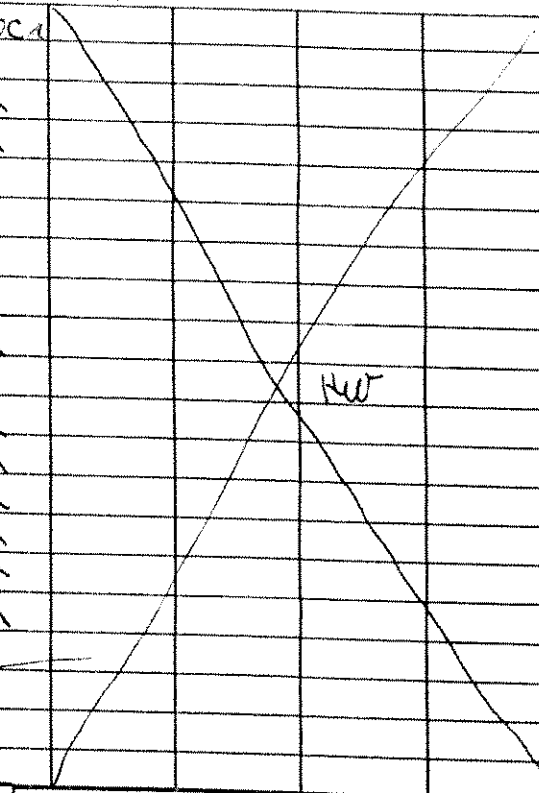
(for addnl. samples use new form)

WO# R904004

Sample Identification

Analyses Requested

REAC#	Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	Analyses Requested
13	51609	ERT-4S	GW	3/31/09	3	40ml metal/4°C	VOCs
14	51606	ERT-4D			3		X
15	51607	ERT-2I			3		X
16	07652	ERT-3I dup			3		X
17	07665	ERT-4S			3		X
18	07654	ERT-1I			3		X
19	51604	ERT-4I			3		X
20	51601	ERT-3D*			9		X
21	51605	ERT-3S			3		X
22	51602	ERT-2D			3		X
23	51600	ERT-1D			3		X
24	51603	ERT-2D dup			3		X
25	07651	TB-0831	W		3		X
26	51608	ERT-2S	GW		3		X
27	51610	ERT-3I *	GW		9		X



Matrix:

- A- Air
- AT-Animal Tissue
- DL- Drum Liquids
- DS- Drum Solids
- GW- Groundwater
- O- Oil
- PR-Product
- PT-Plant Tissue
- PW- Potable Water
- S- Soil
- SD- Sediment
- SL- Sludge
- SW- Surface Water
- TX-TCLP Extract
- W- Water
- X- Other

* MB/MSD

Special Instructions:

1 vial from sample 51604 was received broken, JM 4/1/09

Received 6°C JM 4/1/09

SAMPLES TRANSFERRED FROM CHAIN OF CUSTODY #:

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished by	Date	Received by	Date	Time
GRB analyses	R. Woodruff	4/1/09	[Signature]	4/1/09	9:16						
ALL ANALYSES	[Signature]	4/1/09	[Signature]	4/1/09	3:25						
ALL ANALYSES	[Signature]	4/1/09	[Signature]	4/1/09	15:15						