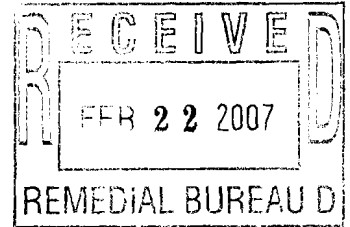


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DATE: February 15, 2007

TO: Terrence Johnson, EPA Work Assignment Manager

THROUGH: Parry Bhambra, REAC Operations Section Leader *Parry Bhambra*

FROM: Ken Woodruff, REAC Task Leader *K.W.*

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

#### PURPOSE

The purpose of this investigation was to (1) collect soil and groundwater samples for analysis of volatile organic compounds (VOCs) beneath and adjacent to the site building at the Vestal Chlorinated Hydrocarbon Source Assessment/Remedy (Vestal Hydrocarbon) site, (2) determine from the sampling results if a continuing source of VOC contamination existed beneath or adjacent to the site building, and (3) relate the results to the performance of the existing on-site soil vapor extraction (SVE) system. The sample locations in this mobilization were initially based upon analytical results from soil gas sampling completed in May 2006 and periodic soil sampling by Severson Environmental Services™ (Severson) to evaluate the effectiveness of the existing SVE system. All work was carried out by personnel of the Lockheed Martin Response Engineering and Analytical Contract (REAC) under the direction of 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 ceased in May 2002. Except for the plant manager's office, the building is presently abandoned, and all manufacturing equipment has been sold.

Between 1988 and 2005, a number of investigations were conducted to characterize the site, delineate the extent of VOC contamination in soil and groundwater, and construct and operate a SVE system. Remedial studies were completed in 1988 and again in 1992 by Ebasco Services, Inc.™ (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 to determine design parameters for the SVE system. Prior to the present investigation, borings to approximately 20 feet below ground surface (bgs) indicated the site is underlain by silty sands with some gravel. These sediments appeared to be either glacial fluvial deposits or more recent alluvial deposits of the Susquehanna River. Reported water level measurements of approximately 16 to 20 feet bgs, may represent the piezometric surface of a semi-confined unit underlying the surficial fine-grained sediments.

Following the construction of the SVE system in 2003, 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, although the yield rate of the SVE system appears to be have dropped during its operation. The SVE system, although in place, is presently not operating

but has recovered more than 2,000 pounds of VOCs.

Prior to the May 2006 ERT/REAC soil gas sampling event, all of the site work had taken place outside of the site building. No investigations had taken place inside or beneath the building subslab. However, the analytical results of the soil gas sampling (Lockheed Martin/REAC, 2006) suggested that VOC sources could be present beneath the building and that residual sources also existed in at least one location beneath the parking area on the south side of the building. The immediate goal of the present investigation was to delineate the extent of these VOC sources using the previous soil gas analytical results as a basis for further soil and groundwater sampling efforts.

## METHODS

### Soil Sampling

Soil sampling was completed at the site from August 2, 2006, through September 8, 2006. The ERT/REAC Geoprobe™ was used to collect continuous five-foot long soil cores to depths of 20 to 25 feet at all sampling locations outside of the building (Figures 1 and 2) and at locations SB-001 through SB-004, SB-0012a and SB-0015 inside the building (Figure 3). Because of access problems, however, it was necessary to procure a sub-contractor with a smaller machine to core at locations SB-012a and SB-015. Coring was also attempted at three other locations inside the building near SB-001 and SB-012 but it was not possible with the smaller equipment to penetrate a gravel layer beneath the concrete floor. Note that two boring locations are designated "SB-012" and "SB-012a" respectively. Initially, a boring completed by the sub-contractor and a boring completed on the outside of the building by REAC were both inadvertently designated as "MW-012". The "a" designation was subsequently used for the boring advanced inside the building. This allowed the correct location number to be retained for subsequent boring samples that had already been assigned sample numbers and submitted for analysis.

Soil cores were collected in acetate sleeves from which a lengthwise strip was removed upon retrieval to expose the core. The core was then screened with an OVA™ flame-ionization detector (FID) and the physical properties described. Portions of the core with elevated FID readings were sampled for VOCs. If elevated FID readings were not obtained in a borehole, a soil sample was usually collected near the bottom of the borehole, to verify the absence of contamination. Samples were collected in 4-ounce glass jars using dedicated stainless steel spoons. All samples were returned to the REAC Laboratory in Edison, New Jersey (NJ) under chain-of-custody procedures for analysis.

### Groundwater Sampling

Based upon the FID field screening results, six locations were selected for installation of temporary groundwater monitor wells to depths of approximately 30 feet bgs (Figure 4). Wells were constructed of one-inch diameter polyvinylchloride (PVC) riser pipe and five feet of # 10 slot screen that were installed through the Geoprobe rods. The rods were then withdrawn, exposing the screened section to the formation. Groundwater grab samples were later collected from each well into 40-milliliter (mL) glass vials using dedicated bailers. The wells were assigned an "MW" prefix followed by the sequential number of the soil boring previously advanced at the same location. All wells were abandoned before leaving the site by pulling the screen and riser pipe and filling each hole with cuttings and/or cement grout.

In addition to the ERT/REAC wells, five older permanent monitor wells, installed by other contractors, were sampled using dedicated bailers. No number designations were available for the older wells and, except for the initial well sampled ("Old MW"), the wells were temporarily assigned letter designations as indicated on Figure 4. Two other older wells (MW-D, MW-E) were also accessed but were found to be dry. Well construction data for both the temporary and older permanent monitor wells (where known) are provided in Table 1.

### Record Collection

During this mobilization, REAC staff visited the Town of Vestal Engineering Office and obtained copies of the 1976 as-built drawings for the public sewer that serviced the site building and the 1980 plans for the most recent building expansion as submitted by the previous owner, Chanago Industries. Prior to 1976, building sanitary waste was disposed

in an on-site septic system. These drawings are presently being studied to identify contamination pathways from the building to the underlying soils. The abandoned septic system leach field is a suspected source but does not appear to be shown on the drawings.

## RESULTS

### Lithology

Descriptive logs of the soil cores and results of the FID screening can be found in Appendix A. The general lithology of sediments underlying the site is fairly consistent. Excluding a thin gravel fill beneath the building subslab, the upper 15 to 20 feet of sediment is river alluvium consisting of uniform, well-sorted silt to clayey silt with lenses of well-sorted very fine sand. These fine-grained sediments are underlain by very coarse poorly sorted sandy gravels. The gravels are probably of Recent age but because of limited borehole penetration, both their thickness and origin are uncertain. South of the building, near the south edge of the parking area, cores from borings SB-042, SB-043, SB-044, SB-047, and SB-054 (Figure 2) indicate a transition of the brown silt and fine sand unit to a gray clay that occasionally contains some plant fragments or organic material. This suggests that the sediments underlying the south end of the parking lot represent overbank environments or relatively quiet water deposition.

Coring and water-level measurements (Table 1) indicated that the water-table at the time of the investigation was within the upper fine-grained sediments at depths ranging from approximately 13 to 15 feet bgs. These sediments probably act as a semi-confining leaky unit to the underlying saturated gravels encountered in most holes at approximately 20 feet bgs.

### Soil Analytical Results

The analytical results of the soil sampling are provided in Table 2, which lists the most commonly detected VOCs. Compounds found in only a few samples are not shown in Table 2 but can be found in the Final Analytical Report, provided here as Appendix B. Note that VOC concentrations in Table 2 are given in micrograms/kilogram ( $\mu\text{g/kg}$ ) but for clarity, the soil VOC values on all figures are given in milligrams/kg ( $\text{mg/kg}$ ).

Analytical results indicate that two areas of elevated VOC concentrations are present on the south side of the site building as shown on Figures 5 and 6. These areas were originally identified in the field by the FID core screening results. FID core screening values in the central portion of both areas exceeded 1000 parts per million (ppm) and were usually associated with strong solvent odors. The two areas of high soil VOCs generally correspond to those mapped earlier by Envirogen (2002) in an investigation completed for the USACE. Work by Severson (2005a,b) also verified the presence of a residual contaminated zone near the southwest portion of the building but did not appear to address the second zone on the southeast side of the building.

In the present investigation, the VOCs 1,1,1-trichloroethane (1,1,1-TCA) and trichloroethylene (TCE) were most prevalent and exhibited the highest concentrations. The compound 1,1,1-TCA was found in all but four samples representing three sampling locations (SB-050, SB-053, SB-054) and TCE was present in samples from all but four locations based on the detection limits indicated in Table 2. Detection of lower levels of TCE and other compounds was limited in most cases by the high detection limits necessary in the analytical procedure to quantify the unusually high values of VOCs present.

Acetone, and the break-down products 1,1-dichloroethene (1,1-DCE), and 1,1-dichloroethane (1,1-DCA) were common secondary compounds (Table 2) but their complete spatial distribution is not entirely defined because of the high detection limits. Gasoline compounds, particularly p&m-Xylene, were also found in many samples.

In nearly all borings, the highest concentrations of VOCs occur in the 15 to 20 foot depth range (Figures 5 and 6). Moreover, observations of staining patterns on cores suggests that the contaminants in many instances may have migrated within the silty matrix along lenses of more permeable very fine sand. The contact between the upper fine-grained sediments and the underlying gravels appears to be the lower depth limit of significant soil contamination.

Concentrations of all compounds decrease by orders of magnitude in the underlying saturated gravels because of dilution, high intergranular porosity, and low adsorptive capacity of the unit.

#### Eastern Area

The bulk of contamination in the eastern area consists mostly of 1,1,1-TCA with secondary amounts of 1,1-DCE and TCE. Other compounds such as cis-1,2-dichloroethene (cis-1,2-DCE) are generally absent at the detection limits indicated on Table 2. Significant levels of 1,1,1-TCA in the mg/kg (ppm) range occur in a narrow band extending southeast from approximately SB-005 to SB-044 (Figure 7). The highest level of contamination is centered around soil boring SB-030 (Figures 5 and 6) where the 1,1,1-TCA concentration is nearly 22,000 mg/kg at 16 feet bgs, or more than two percent (%) of soil mass. Likewise, the 1,1-DCE concentration (62.6 mg/kg) at 16 feet bgs is the highest for the area and the TCE concentration (12.1 mg/kg) is the second highest (Figures 8 and 9 respectively). The extremely high VOC contamination (in the thousands of ppm range) appears to be limited to an area approximately 20 feet long by less than 10 feet wide between SB-028 and SB-030 (Figure 6). Secondary areas of contamination with total VOC concentrations in the 1,000 to 4,000 mg/kg range occur to the southeast centered on soil borings SB-041, SB-044, and SB-045 (Figure 6).

The recommended New York State Department of Environmental Conservation (NYSDEC) soil cleanup criteria (1994) for 1,1,1-TCA to protect groundwater is 0.76 ppm. The area that encompasses soils with this concentration or greater is approximately 75 feet by 80 feet and is shown on Figure 7.

#### Western Area

The highest contamination in the western area is centered around soil borings SB-009, SB-022, and SB-023 where the highest total VOC concentrations are 26,200 mg/kg, 11,100 mg/kg, and 36,600 mg/kg respectively (up to 3.6 % of soil mass) within the 15 to 17 foot depth interval (Figures 5 and 6). The VOCs consist mainly of 1,1,1-TCA at concentrations of 19,000 mg/kg; 9,550 mg/kg; and 23,600 mg/kg respectively with TCE accounting for most of the remaining VOC mass (Figure 9, Table 2). Lower concentrations of 1,1-DCE and toluene in the low ppm range are also present. The area of highly elevated VOCs (in the thousands of ppm range) is approximately 25 feet by 20 feet. However, the area where concentrations of 1,1,1-TCA exceed the NYSDEC soil cleanup objective is approximately 75 by 35 feet.

#### Building Interior

Because of access limitations, it was only possible to install six soil borings inside the building (Figure 10). Nevertheless, the concentrations of VOCs in the soils generally correlated to the magnitude of soil gas concentrations measured in the previous site visit (Figure 3). The highest total VOC concentration was 243 mg/kg (Figure 11), of which 83.6 mg/kg was 1,1,1-TCA (Figure 12), occurred in soil boring SB-012a at 16 feet bgs. The highest concentration of 1,1-DCE found inside the building was 5.82 but it was below the method detection limit (Figure 13). The TCE concentration in boring SB-012a was likewise the highest detected inside the building at 108 mg/kg (Figure 14). Toluene and p&m-xylene were also relatively elevated at concentrations of 18 mg/kg and 15.5 mg/kg, respectively (Table 2). The compound cis-1,2-DCE was found at relatively low values in boring SB-012a with the maximum concentration slightly exceeding 1 mg/kg at 16 feet bgs. The signature of the contaminant is similar to that in the eastern area outside the building; i.e. TCA and TCE are the dominant contaminants.

In soil boring SB-004 (Figure 10), the highest VOC concentrations were found near the top of the hole in the five-foot depth sample (Table 2). For instance, the TCE concentration at five feet bgs was 1.01 mg/kg but decreased by two orders of magnitude in deeper samples. All of the other compounds (except 1,1,1-TCA) with detectable concentrations at five feet bgs, including cis-1,2-DCE; 1,1-DCE; 1,1-DCA and toluene are absent below the five-foot depth sample. Soil boring SB-003 also shows the same depth distribution for TCE and cis-1,2-DCE concentrations except that initial contaminant levels are an order of magnitude lower than in soil boring SB-004. These depth patterns suggest that the VOC source was within the building rather than outside. The zone of contamination also appeared to be approximately five feet above the water table at the time of sampling (see Table 1), further indicating that the contamination had probably not migrated beneath the building via the groundwater system. NYSDEC soil cleanup objectives are not

presented within the building because it is not certain that the limits of concentration have been completely defined.

#### Groundwater Analytical Results

The groundwater analytical results are provided in Table 3 and sampling locations are indicated on Figure 4. All of the wells were screened in the upper five feet of the gravel unit, just below the contact with the overlying silts. Of the 11 wells sampled, 1,1,1-TCA and TCE were found in all but monitor wells MW-A and MW-B. The compound 1,1-DCE was found in all monitor wells except MW43/44, MW-B, MW-F, and MW-G. The sample from Monitor Well MW-009 (Figure 2) contained the highest concentrations of 1,1,1-TCA and TCE at 1,640 milligrams/liter (mg/L) and 354 mg/L respectively. Significant concentrations of both 1,1-DCE (103 mg/L) and 1,1-DCA (30.2 J mg/L) were also present. The sample from Monitor Well MW-020, in the same area as MW-009 also contained 126 mg/L of 1,1,1-TCA and lower levels of 1,1-DCE (6.31 mg/L), 1,1-DCA (1.53J mg/L), cis-1,2-DCE (2.49J mg/L) and TCE (2.49J mg/L).

In the eastern area, the samples from monitor well MW-005 and MW-007 contained mainly 1,1,1-TCA at 75.8 and 22.1J mg/L respectively. Low levels of acetone and 1,1-DCE were found in the sample from Monitor Well MW-005 but not in MW-007. Inside the building (Figure 14), the sample from Monitor Well MW-001 contained 17.2 mg/L of TCE, 9.70 mg/L of 1,1,1-TCA and 6.86 mg/L of 1,1-DCE. In general, the groundwater analytical results were compatible with the soil sampling results that had previously suggested a possible sub-slab source of VOCs.

#### CONCLUSIONS

It is apparent that high levels of VOC soil contamination remain at the site despite the installation of the SVE system. As indicated earlier however, the yield of the SVE system appears to have steadily decreased while the system was in operation and Severson (2005c) noted that SVE extraction wells in areas with high VOC soil concentrations showed low yield rates. A careful look at the soil cores suggests that at specific locations, seemingly small differences in lithology, and therefore in permeability, may be critical to the efficiency of the SVE system. Staining on cores and closely spaced FID readings suggest that, in some cases, the VOCs have preferentially migrated into and along thin interbedded sands (where present) within the upper fine-grained unit. As discussed above, coring results also suggest that the soils become increasingly clayey towards the southern portion of the parking area on the south side of the building. The generally fine-grained nature of the upper 20 feet of soil, and the probable lack of continuity among the thin sand lenses, appear to limit the effectiveness of the SVE system.

Soil contamination outside of the building appears greatest in the 15 to 20 foot bgs depth range but drops off sharply in the underlying gravels. Moreover, the results of the monitor well sampling indicates that the shallow groundwater also contains high levels of VOCs. The occurrence of VOC concentrations in the thousands of ppm range in soils of the shallow fine-grained unit strongly suggests it is at least one source for the VOCs in the groundwater. The contribution from off-site areas or other nearby on-site areas was not investigated in this study.

The extent of contamination beneath the site building and its relation to exterior sources could not be well defined during this mobilization because of access problems and therefore additional investigations beneath the building may be warranted. Further work may involve, in preferred order (1) the use of a small portable soil boring equipment, (2) angle drilling to inaccessible subsurface locations within the building from either interior or exterior locations that are accessible to boring equipment, and (3) removal of partitions or other restrictions that limit rig access. However this last option may only be partially successful because overhead utilities that are vital to the integrity of the building, such as fire prevention and heating/cooling systems, further limit rig access. Additional soil sampling to confirm the absence of contamination is also recommended on the north side of the building (two to four locations) and just to the west of borings SB-011 and SB-027 on the southwest side of the building (two to four locations).

To effectively remediate the areas of high soil VOCs, an alternative to the existing SVE system appears necessary. Other options are presently being evaluated by REAC Engineering Group personnel and will be discussed in a subsequent report.

## FUTURE ACTIVITIES

Additional work at the site will include the assessment and possible implementation of remedial methods and possibly additional subslab borings and sampling as indicated on Figure 11.

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Cc: Central File - WA # EAC00198  
Electronic File - I:/Archive/REAC4/00198/D/TR/020907  
Dennis Miller, REAC Program Manager (cover page only)

TABLE 1  
MONITOR WELL DATA  
VESTAL CHLORINATED HYDROCARBON SOURCE ASSESSMENT/REMEDY SITE  
VESTAL, NEW YORK

Well No.	Screen Interval (feet bgs)	Water Level (feet bgs)	Measured Depth (feet bgs)
MW-001	24 - 29	NA	29
MW-005	20 - 30	12.46	30
MW-007	25 - 30	14.20	30
MW-009	23 - 28	14.51	28
MW-020	23 - 28	13.80	28
MW-43/44	25 - 30	13.20	30
MW-A	UN	10.26	15.2
MW-B	UN	9.87	15.3
MW-C	UN	11.08	13.3
MW-D	UN	DRY	6.0
MW-E	UN	DRY	10.9
MW-F	UN	13.17	16.4
MW-G	UN	13.63	14.8

bgs = below ground surface

NA = not available

UN = unknown

TABLE 2  
VOCs IN SOIL (micrograms/kilogram)  
VESTAL CHLORINATED HYDROCARBON SOURCE ASSESSMENT/REMEDY SITE  
VESTAL, NEW YORK

Boring No.	Trichloroethene	Acetone	1,1-DCE	Methylene Chloride	Carbon Disulfide	1,1-DCA	2-Butanone	Chl-1,2-DCE	1,1,1-TCA	TCE	Toluene	PCE	p,m-Xylene	Naphthalene
SB-001, 0.8'	U	U	9.3	U	U	132	U	3.97 J	17.8	44.7 J	U	7.24	U	U
SB-001, 1.5'	U	9.99 J	1.76 J	22.4	U	3.91 J	U	928	403	827	3.05 J	U	U	U
SB-001, 12'	U	187	1.72 J	U	U	10.8	49.8	147	81.4	80.3	3.46 J	U	U	U
SB-001, 15'	24.8 J	117	233	146	U	98.4	31.3	787	78.3	234	87.4	U	7.94 J	U
SB-001, 17.5'	9.82	83	182	157	U	27.9	11.3	1,940	2,820	12,900 J	289 J	U	68.7	U
SB-001, 20'	49.2	37.4	468 J	42	U	12.2	U	719 J	5,190	4,230	313 J	U	67.5	U
SB-001, 22.5'	203	68	901	180	U	28.8	U	71.4	783	2,640	321 J	U	41.1	U
SB-001, 24'	226	110	893	198	U	34.3	8.29	300	4,040	8,110	834	U	108	U
SB-001, 25'	88.7	28.3	878 J	14.1	U	37.7	3.24 J	829 J	788 J	36,000	4,820	21	2,200	U
SB-001, 25-30'	93.2	28.1 J	810	U	3.9	82.2	U	288	778	2,190	383	8.2	U	U
SB-001, 30'	U	U	26	U	U	1.82 J	U	10.2	93.9	1,780	89.8	6.86 J	6.22 J	U
SB-002, 5'	U	U	U	U	U	3.61 J	U	204	34.7	168	4.58 J	U	U	U
SB-002, 10'	U	U	U	U	U	3.00 J	U	204	108	59.8 J	U	U	U	U
SB-002, 10 dup	U	U	U	U	U	10.8	U	204	108	112	U	U	U	U
SB-002, 15'	U	U	1.56 J	U	U	1.96 J	U	143	147	144	U	U	U	U
SB-002, 20'	U	U	19.3	U	U	13	U	837 J	94.4	162	U	U	U	U
SB-003, 4.5'	U	U	U	U	U	21.6	U	438	53.1	273	3.05 J	U	4.28 J	U
SB-003, 10'	U	U	U	U	U	U	U	13.9 J	87.3	114	U	U	U	U
SB-003, 15'	U	U	3.08 J	U	U	2.04 J	U	7.88	38.7	20	U	U	U	U
SB-004, 5'	U	U	114	U	U	21.7 J	U	8.7	73.1	72	1.71 J	U	U	U
SB-004, 7.5'	U	U	U	U	U	U	U	308	378	1,070	17.1 J	U	U	U
SB-004, 10'	U	U	U	U	U	U	U	U	34.9	51	U	U	U	U
SB-004, 15'	U	U	U	U	U	U	U	U	61.1	16.5 J	U	U	U	U
SB-004, 20'	U	U	U	U	U	U	U	U	188	84	U	U	U	U
SB-005, 4'	U	24.3	U	U	U	U	U	U	118	43	U	U	U	U
SB-005, 10'	U	U	U	U	U	U	U	U	162	97	U	U	U	U
SB-005, 20'	U (12,200)	U	1,320 J	U (3,050)	U (3,050)	U (3,050)	U (3,050)	U (3,050)	33.5	13.4 J	U	U (3,050)	U (6,100)	U
SB-005, 23'	U	U	U	U	U	U	U	U	890,000 J	1,040 J	U (3,050)	U (3,050)	U (3,050)	U
SB-006, 4.5'	U	130	19.2 J	U	U	U	U	U	178	70	U	U	U	U
SB-007, 4.5'	U	140 J	34 J	U	U	U	U	U	545	278	U	U	U	U
SB-007, 20'	U	120 J	178 J	149 J	U	41.2	U	U	827	287	U	U	U	U
SB-008, 5'	U	U	85.2	U	U	38.2 J	U	U	886	125 J	U	U	U	U
SB-008, 7.5'	U	U	U	U	U	U	U	19.9 J	879	406	U	U	U	U
SB-008, 15'	U	U	145 J	187 J	U	80.5 J	U	U	719	313	U	U	U	U
SB-008, 20'	U (3,160)	U	3,210	U (3,160)	U (3,160)	1,180 J	U (3,160)	U (3,160)	93,200	3,380	U (3,160)	U (3,160)	U (6,330)	U (3,160)
SB-008, 25'	U	U	U	U	U	U	U	U	593 J	80.1 J	U	U	U	U



[illegible]

TABLE 2 (Continued)  
VOCs IN SOIL (micrograms/kilogram)  
VESTAL CHLORINATED HYDROCARBON SOURCE ASSESSMENT/REMEDY SITE  
VESTAL, NEW YORK

Boring No.	Trichlorofluoromethane	Acetone	1,1-DCE	Methylene Chloride	Carbon Disulfide	1,1-DCA	2-Butanone	cis-1,2-DCE	1,1-TCa	TCE	Toluene	PCE	o,m-Xylene	Naphthalene
SB-029, 16'	U (6,580)	U (26,300)	U (6,580)	U (6,580)	U (6,580)	U (6,580)	U (6,580)	U (6,580)	15,300	U (5,750)	U (6,580)	U (6,580)	U (13,200)	U (6,580)
SB-029, 17.5'	U (6,100)	U (24,400)	U (6,100)	U (6,100)	U (6,100)	U (6,100)	U (6,100)	U (6,100)	7,550	U (6,100)	U (6,100)	U (6,100)	U (12,200)	U (6,100)
SB-029, 18'	U (6,250)	R	4,050 J	U (6,250)	U (6,250)	U (6,250)	U (6,250)	U (6,250)	340,000 J	U (6,250)	U (6,250)	U (6,250)	U (12,500)	U (6,250)
SB-029, 20'	U (5,880)	U (23,500)	U (5,880)	U (5,880)	U (5,880)	U (5,880)	U (5,880)	U (5,880)	29,700	U (5,880)	U (5,880)	U (5,880)	U (11,800)	U (5,880)
SB-030, 15'	U (6,020)	U (24,100)	2,930 J	U (6,020)	U (6,020)	U (6,020)	U (6,020)	U (6,020)	133,000 J	U (6,020)	U (6,020)	U (6,020)	U (1,200)	U (6,020)
SB-030, 16'	U (6,170)	U (24,700)	62,400	U (6,170)	U (6,170)	8,230	U (6,170)	U (6,170)	21,900,000	12,100	U (6,170)	U (6,170)	U (12,300)	U (6,170)
SB-030, 17.5'	U (6,100)	U (24,400)	U (6,100)	U (6,100)	U (6,100)	U (6,100)	U (6,100)	U (6,100)	69,500	U (6,100)	U (6,100)	U (6,100)	U (12,200)	U (6,100)
SB-030, 20'	U	U	173 J	151 J	U	U	U	U	4,820	177 J	U	U	U	U
SB-031, 19.5'	U (3,010)	U (12,000)	U (3,010)	U (3,010)	U (3,010)	U (3,010)	U (3,010)	U (3,010)	24,100	U (3,010)	U (3,010)	U (3,010)	U (6,020)	U (3,010)
SB-032, 15'	U	U	U (6,020)	165 J	U	U	U	U	3,430	481	U	U	U	U
SB-032, 16.5'	U (31,300)	U (125,000)	U (31,300)	U (31,300)	U (31,300)	U (31,300)	U (31,300)	U (31,300)	688,000	U (31,300)	U (31,300)	U (31,300)	U (31,300)	U (31,300)
SB-032, 18'	U (617)	U (2,470)	494 J	U (617)	U (617)	U (617)	U (617)	U (617)	13,300	699	U (617)	U (617)	U (1,230)	U (617)
SB-033, 12.5'	U	R	U	159 J	U	U	U	U	3,080	689	U	U	U	U
SB-033, 16.5'	U (6,170)	R	U (6,170)	U (6,170)	U (6,170)	U (6,170)	U (6,170)	U (6,170)	121,000 J	U (6,170)	U (6,170)	U (6,170)	U (6,170)	U (6,170)
SB-033, 19.5'	U (595)	R	U (595)	U (595)	U (595)	U (595)	U (595)	U (595)	13,100	454 J	U (595)	U (595)	U (1,190)	U (595)
SB-034, 7.5'	U	U	U	U	U	U	U	U	78.9	U	U	U	U	U
SB-034, 18.5'	U (588)	U (2,350)	U (588)	U (588)	U (588)	U (588)	U (588)	U (588)	1,940	538 J	U (588)	U (588)	U (1,180)	U (588)
SB-035, 7.5'	U	U	U	U	U	U	U	U	305	U	U	U	U	U
SB-035, 19-20'	U (595)	U (2,380)	U (595)	U (595)	U (595)	U (595)	U (595)	U (595)	8,190	581 J	U (595)	U (595)	U (1,190)	U (595)
SB-036, 19.5'	U (575)	U (2,300)	410 J	U (575)	U (575)	U (575)	U (575)	U (575)	10,700	271 J	U (575)	U (575)	U (1,150)	U (575)
SB-037, 6'	U	U	U	U	U	U	U	U	80.3 J	U	U	U	U	U
SB-037, 20'	U (3,050)	U (12,000)	U (3,050)	U (3,050)	U (3,050)	U (3,050)	U (3,050)	U (3,050)	58,000	U (3,050)	U (3,050)	U (3,050)	U (6,100)	U (3,050)
SB-038, 15'	U (3,050)	U (12,200)	4,150	U (3,050)	U (3,050)	U (3,050)	U (3,050)	U (3,050)	156,000	854 J	U (3,050)	U (3,050)	U (6,100)	U (3,050)
SB-038, 18'	U (12,300)	U (49,400)	U (12,300)	U (12,300)	U (12,300)	U (12,300)	U (12,300)	U (12,300)	278,000	U (12,300)	U (12,300)	U (12,300)	U (24,700)	U (12,300)
SB-038, 20'	U (3,010)	U (12,000)	2,400 J	U (3,010)	U (3,010)	U (3,010)	U (3,010)	U (3,010)	51,800	U (3,010)	U (3,010)	U (3,010)	U (6,020)	U (3,010)
SB-039, 17'-18'	U (30,500)	U (122,000)	12,700 J	U (30,500)	U (30,500)	U (30,500)	U (30,500)	U (30,500)	884,000	U (30,500)	U (30,500)	U (30,500)	U (61,000)	U (30,500)
SB-039, 19.5'	U (3,010)	U (12,000)	U (3,010)	U (3,010)	U (3,010)	U (3,010)	U (3,010)	U (3,010)	86,500	U (3,010)	U (3,010)	U (3,010)	U (6,020)	U (3,010)
SB-039, 20'	U (5,950)	U (23,800)	U (5,950)	U (5,950)	U (5,950)	U (5,950)	U (5,950)	U (5,950)	18,300	U (5,950)	U (5,950)	U (5,950)	U (11,900)	U (5,950)
SB-040, 18'	U (15,400)	U (61,700)	U (15,400)	U (15,400)	U (15,400)	U (15,400)	U (15,400)	U (15,400)	328,000	U (15,400)	U (15,400)	U (15,400)	U (30,900)	U (15,400)
SB-040, 20'	U (588)	U (2,350)	319 J	U (588)	U (588)	U (588)	U (588)	U (588)	16,700	233 J	U (588)	U (588)	U (1,180)	U (588)
SB-041, 16.5'	U (122,000)	U (488,000)	U (122,000)	U (122,000)	U (122,000)	U (122,000)	U (122,000)	U (122,000)	2,450,000	U (122,000)	U (122,000)	U (122,000)	U (244,000)	U (122,000)
SB-041, 18'	U (2,870)	U (11,500)	U (2,870)	U (2,870)	U (2,870)	U (2,870)	U (2,870)	U (2,870)	38,500	U (2,870)	U (2,870)	U (2,870)	U (5,750)	U (2,870)
SB-042, 17.5'	U (24,700)	U (98,800)	U (24,700)	U (24,700)	U (24,700)	U (24,700)	U (24,700)	U (24,700)	285,000	U (24,700)	U (24,700)	U (24,700)	U (49,400)	U (24,700)
SB-042, 19.5'	U (1,220)	U (4,880)	1,180 J	U (1,220)	U (1,220)	U (1,220)	U (1,220)	U (1,220)	58,200	2110	U (1,220)	U (1,220)	U (2,440)	U (1,220)
SB-043, 20.5'	U	153 J	25.3 J	U	17.5 J	76.5 J	21.5 J	U	1,850 J	55.3 J	U	18.8 J	U	U
SB-044, 15.5'	U (602)	U (2,410)	519 J	U (602)	U (602)	U (602)	U (602)	U (602)	37,600	487 J	U (602)	U (602)	U (1,200)	U (602)
SB-044, 18'	U (128,000)	U (613,000)	U (128,000)	U (128,000)	U (128,000)	U (128,000)	U (128,000)	U (128,000)	3,200,000	U (128,000)	U (128,000)	U (128,000)	U (258,000)	U (128,000)
SB-044, 20'	U (116,000)	U (116,000)	U (116,000)	U (116,000)	U (116,000)	U (116,000)	U (116,000)	U (116,000)	4,350,000	U (116,000)	U (116,000)	U (116,000)	U (233,000)	U (116,000)
SB-045, 17.5'	U (62,500)	U (250,000)	U (62,500)	U (62,500)	U (62,500)	U (62,500)	U (62,500)	U (62,500)	1,090,000	U (62,500)	U (62,500)	U (62,500)	U (125,000)	U (62,500)
SB-046, 16'	U (625)	U (2,500)	U (625)	U (625)	U (625)	U (625)	U (625)	U (625)	6,380	209 J	U (625)	U (625)	U (1,250)	U (625)
SB-046, 18.5'	U (31,300)	U (125,000)	U (31,300)	U (31,300)	U (31,300)	U (31,300)	U (31,300)	U (31,300)	298,000	U (31,300)	U (31,300)	U (31,300)	U (62,500)	U (31,300)
SB-046, 20'	U (3,050)	U (12,200)	1,350 J	U (3,050)	U (3,050)	U (3,050)	U (3,050)	U (3,050)	85,300	3,580	U (3,050)	U (3,050)	U (6,100)	U (3,050)

TABLE 2 (Continued)  
VOCs IN SOIL (micrograms/kilogram)  
VESTAL CHLORINATED HYDROCARBON SOURCE ASSESSMENT/REMEDY SITE  
VESTAL, NEW YORK

Boring No.	Trichloroethene	Acetone	1,1-DCE	Methylene Chloride	Carbon Disulfide	1,1-DCA	2-Butanone	cis-1,2-DCE	1,1,1-TCA	TCE	Toluene	PCE	p,m-Xylene	Naphthalene
SB-047, 20'	U	148 J	81.1 J	U	19.3 J	166 J	24.1 J	13.3 J	164 J	135 J	U	24.9 J	U	U
SB-048, 20'	U	39.0 J	5.95 J	3.88 J	8.40 J	U	U	8.59 J	35.8 J	8.40 J	U	U	U	U
SB-049, 21'	U	34.1 J	22.3 J	U	U	35.2 J	U	U	272	867	U	36.3 J	U	U
SB-050, 19.5'	U	8.02 J	U	U	U	U	U	U	U	8	U	U	U	U
SB-051, 19.5'	U (3,090)	U (12,300)	1,930 J	U (3,090)	U (3,090)	U (3,090)	U (3,090)	U (3,090)	39,400	1,350 J	U (3,090)	U (3,090)	U (6,170)	U (3,090)
SB-052, 7.5'	U	U	U	U	U	U	U	U	U	4.37 J	U	U	U	U
SB-052, 19.5'	U	U	53.9 J	U	U	19.3 J	U	U	1,340	28.1 J	U	U	U	U
SB-053, 19'	U	U	U	U	U	U	U	U	U	9.42	U	U	U	U
SB-054, 20'	U	34.1	U	U	U	U	U	U	U	29.9	U	U	U	U
SB-055, 19'	U	U	3.41 J	U	U	U	3.51 J	U	U	38.2	U	U	U	U
SB-056, 19.5'	U	U	U	7.25	U	U	U	29.8	55.3	122	U	U	U	U

J = estimated value  
K = 1,000

R = reject  
U = non-detect (reporting limit)

Bold = detected compound

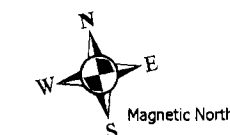
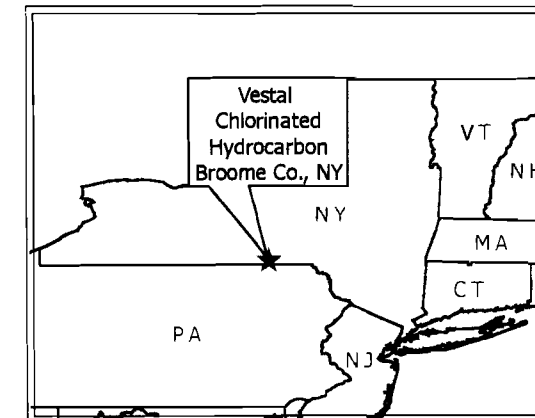
1,1-DCE = 1,1-Dichloroethene  
1,1-DCA = 1,1-Dichloroethane  
PCE = Tetrachloroethene

cis-1,2-DCE = cis-1,2-Dichloroethene  
TCE = Trichloroethene

TABLE 3  
VOCs IN GROUNDWATER (micrograms/liter)  
VESTAL CHLORINATED HYDROCARBON SOURCE ASSESSMENT/REMEDY SITE  
VESTAL, NEW YORK

	MW-001	MW-005	MW-007	MW-009	MW-020	MW-43/44	MW-A	MW-A dup	MW-B	MW-F	MW-G	OLD MW
Vinyl Chloride	U	1.38 J	65.4 J	60.2 J	U (50,000)	8.41 J	U	U	U	U	U	U
Chloroethane	U	9.41	60.2 J	U (50,000)	234 J	U	U	U	U	U	U	U
Trichlorofluoromethane	401 J	U	U	U	U	U	U	U	U	U	U	U
Acetone	U	2140 J	U	U (200,000)	2,380 J	43.1 J	U	U	U	U	U	U
1,1-DCE	6,860	1,250	438 J	103,000	16,300 J	6,310	U	2.10 J	U	U	U	33
Methylene Chloride	155 J	U	438 J	2,640 J	U (50,000)	17.3	U	U	U	U	U	U
Carbon Disulfide	U	3.83 J	U	U (50,000)	16,900 J	1,530 J	U	4.04 J	U	U	U	U
1,1-DCA	592	244 J	135	30,200 J	16,900 J	1,530 J	U	14.2	U	U	U	69.4
2-Butanone	U	U	U	72.6 J	U (50,000)	5.47	U	U	U	U	U	U
cis-1,2-DCE	3,310	U	5.75	255 J	2,490 J	U (50,000)	U	U	U	U	U	2.15 J
1,1,1-TCA	9,700	75,800	22,100 J	1,640,000	466,000	126,000	12.1	U	U	U	U	426
TCE	17,200	191 J	124	354,000	152,000	2,490 J	13.5	U	U	U	U	417 J
1,1,2-TCA	U	U	U	323 J	U (50,000)	8.94	U	U	U	U	U	U
Toluene	725	U	U	305 J	U (50,000)	U	U	U	U	U	U	U
PCE	U	4.25 J	37.9 J	U (50,000)	5.66	U	U	U	U	U	U	U
o,m-Xylene	U	U	41.3 J	U (100,000)	U	U	U	U	U	U	U	U
Naphthalene	U	U	22.6	U (50,000)	U	U	U	U	U	U	U	U

J = estimated value  
 U = non-detected (reporting limit)  
 Bold = detected compound  
 1,1-DCE = 1,1-Dichloroethene  
 1,1-DCA = 1,1-Dichloroethane  
 PCE = Tetrachloroethene  
 cis-1,2-DCE = cis-1,2-Dichloroethene  
 TCE = Trichloroethene



**Legend**

Soil Boring and Monitor Well Locations  
(Exterior to Building)

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

Map Creation Date: 27September2006

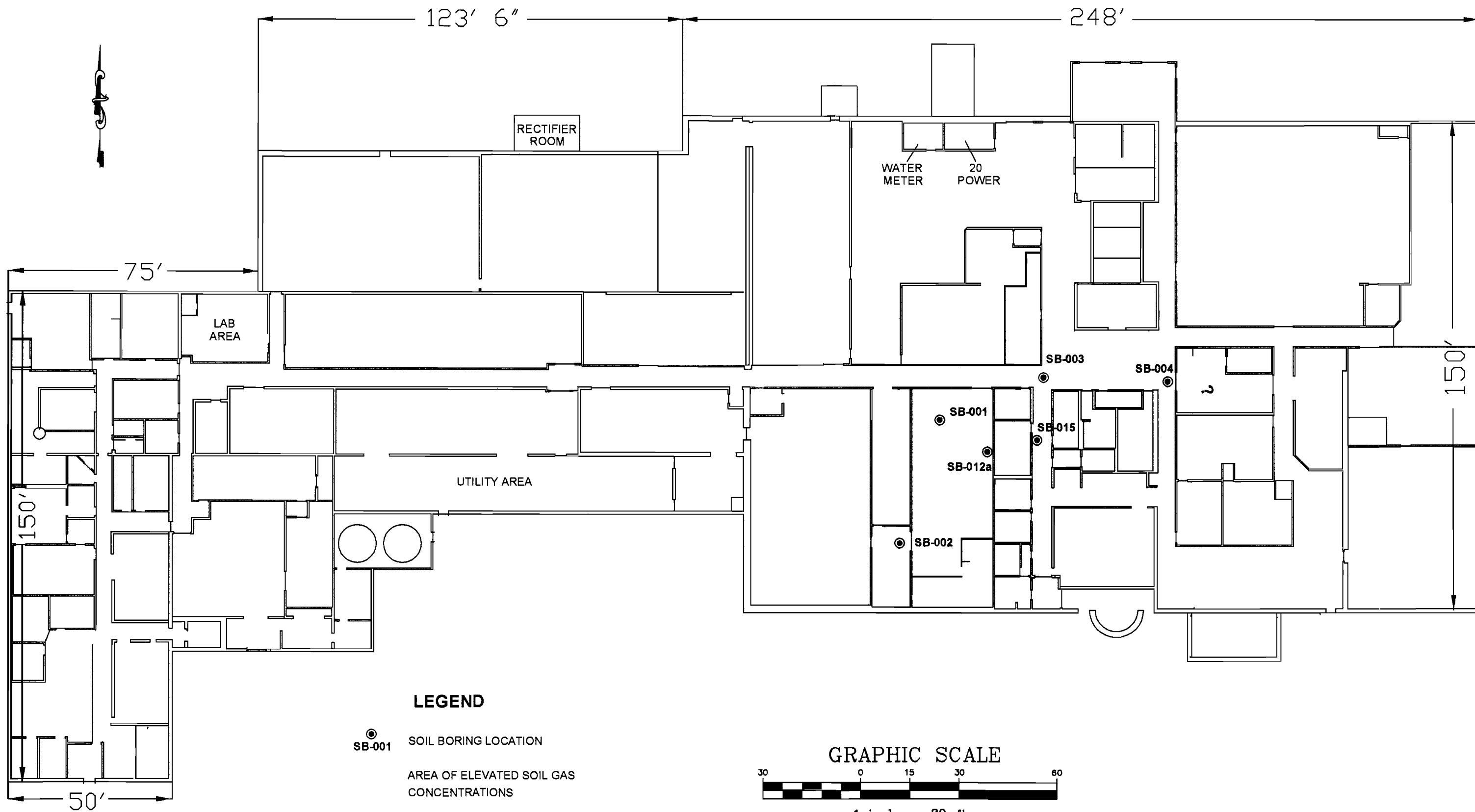
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Revision Number: 003

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W.A.# 0-198

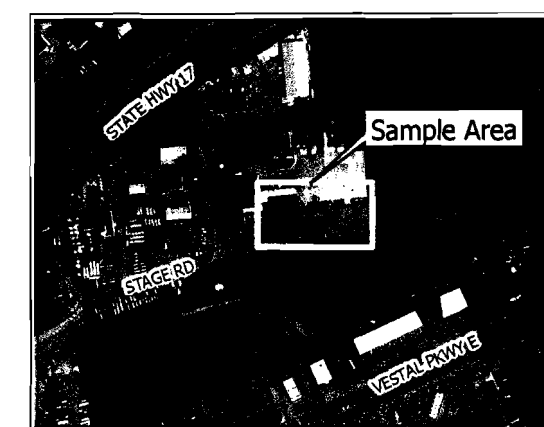
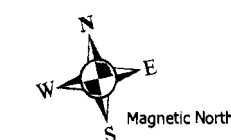
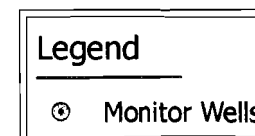
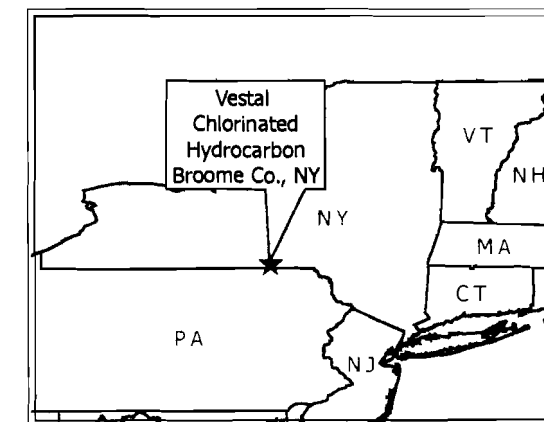
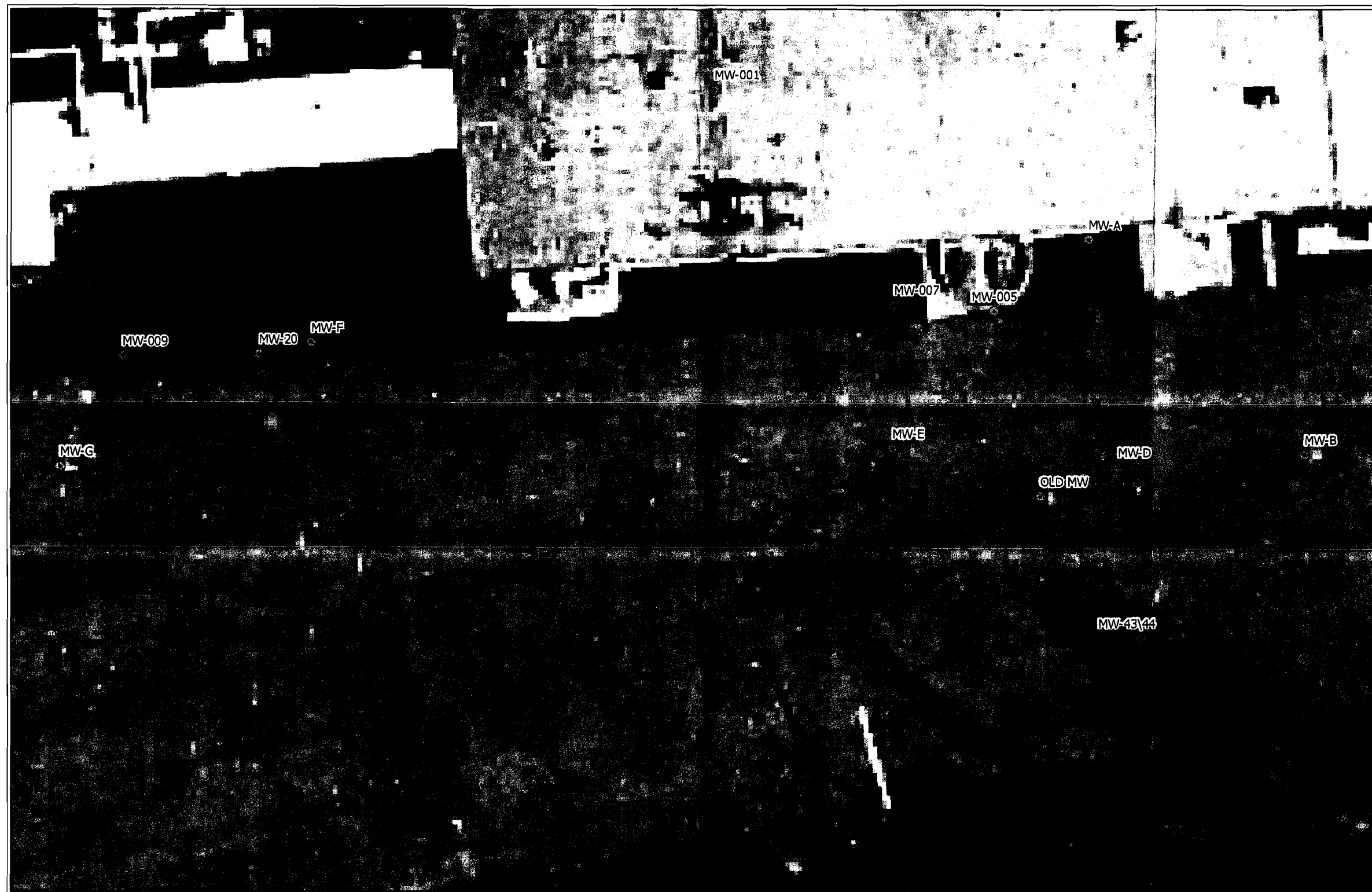
**Figure 1**  
**Site Location Map**  
**Vestal Chlorinated Hydrocarbon Site**  
**Vestal, New York**



Site Plan from:  
American Board Companies Inc.  
rev. 5/13/04

U.S. EPA ENVIRONMENTAL RESPONSE TEAM  
RESPONSE ENGINEERING AND ANALYTICAL CONTRACT  
EP-C-04-032  
W.A.# 0-198

FIGURE 3  
BORING LOCATIONS  
INSIDE BUILDING  
VESTAL CHLORINATED HYDROCARBON SITE  
VESTAL, NEW YORK



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

Map Creation Date: 02October2006

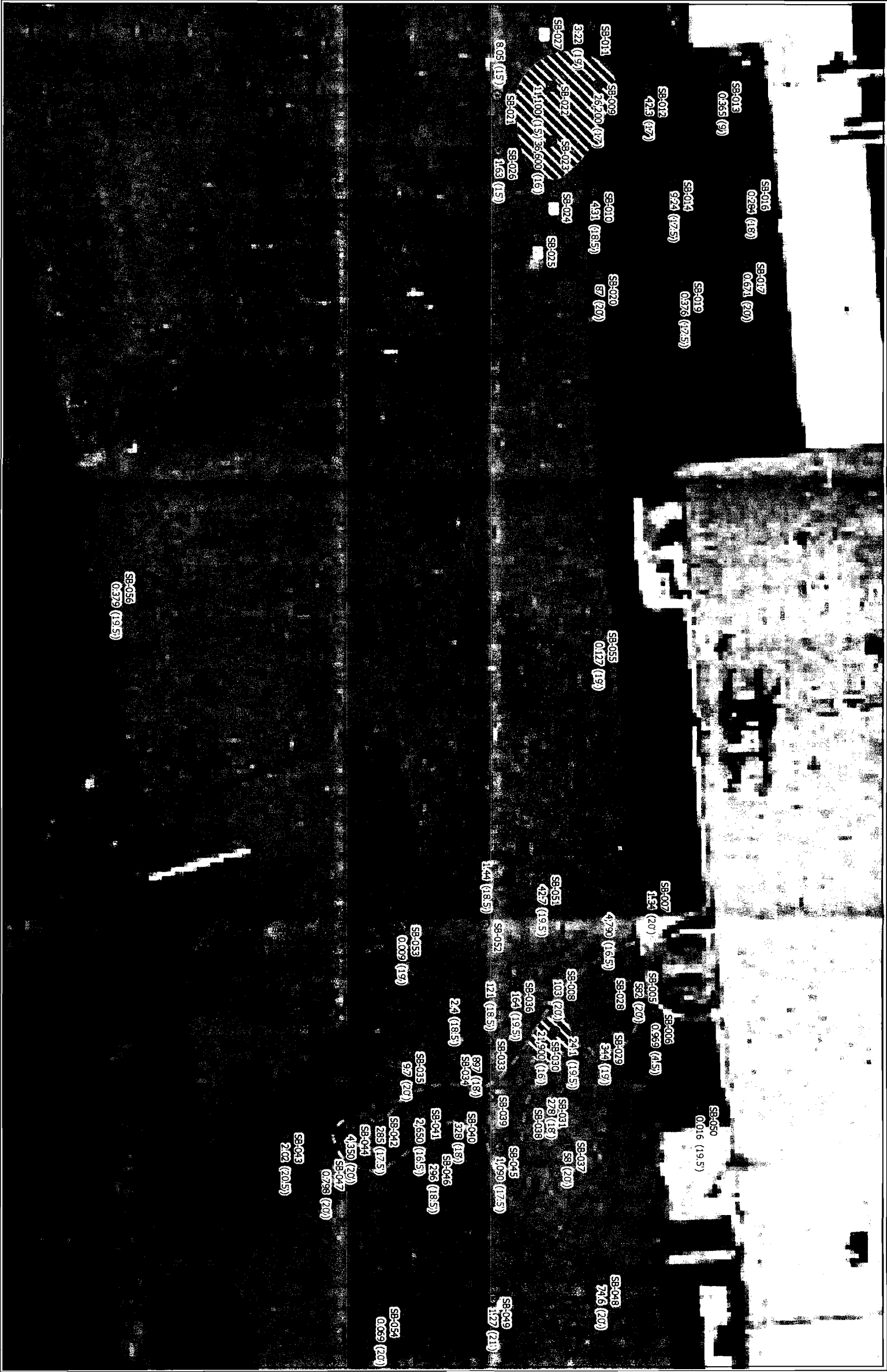
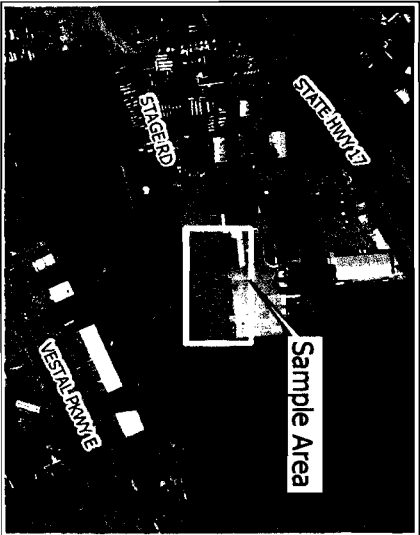
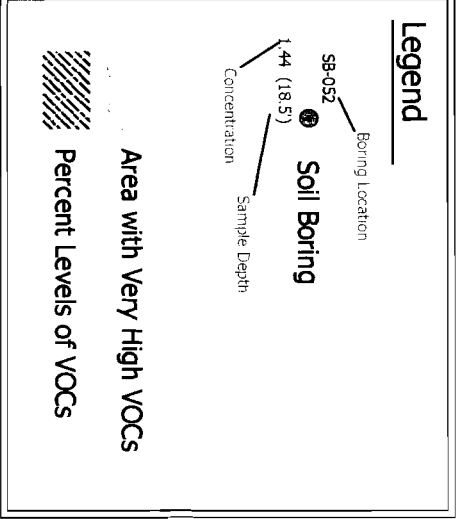
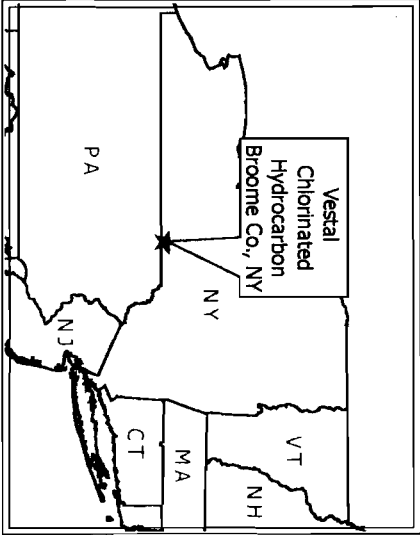
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Revision Number: 003

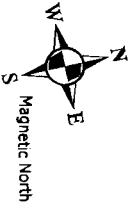
U.S. EPA Environmental Response Team  
Response Engineering and Analytical Contract  
EP-C-04-032  
W.A.# 0-198

Figure 4  
Well Location Map  
Vestal Chlorinated Hydrocarbon Site  
Vestal, New York



Map created using NY DOT DDOQ (2002) and site survey/  
GPS data. GPS collected in Lat., Lon., Decimal Degrees, WGS84  
Map Creation Date: 02October2006  
Coordinate system: New York State Plane (Central)  
FPS: 3102  
Datum: NAD83  
Units: Feet

VOCs : Volatile Organic Compounds  
NS : Not Sampled  
NOTE: All concentration values in milligrams per kilogram (mg/kg)  
All depth interval values in feet below ground surface (bgs)

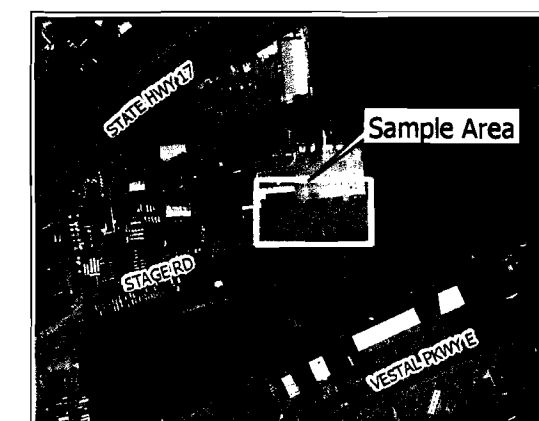
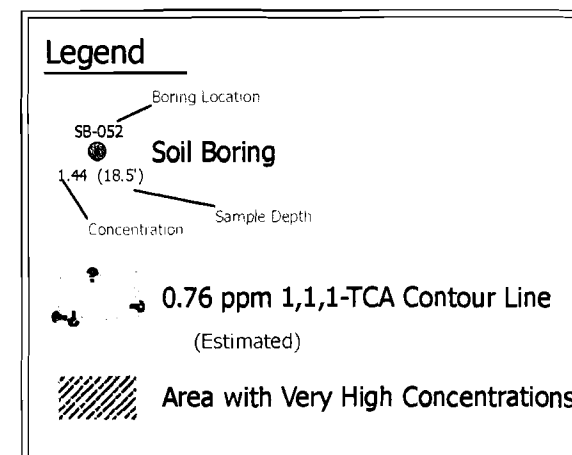
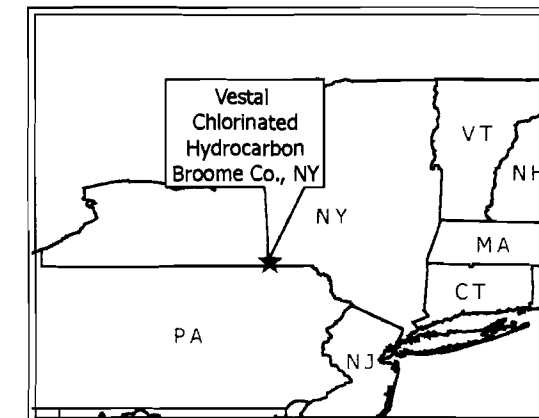
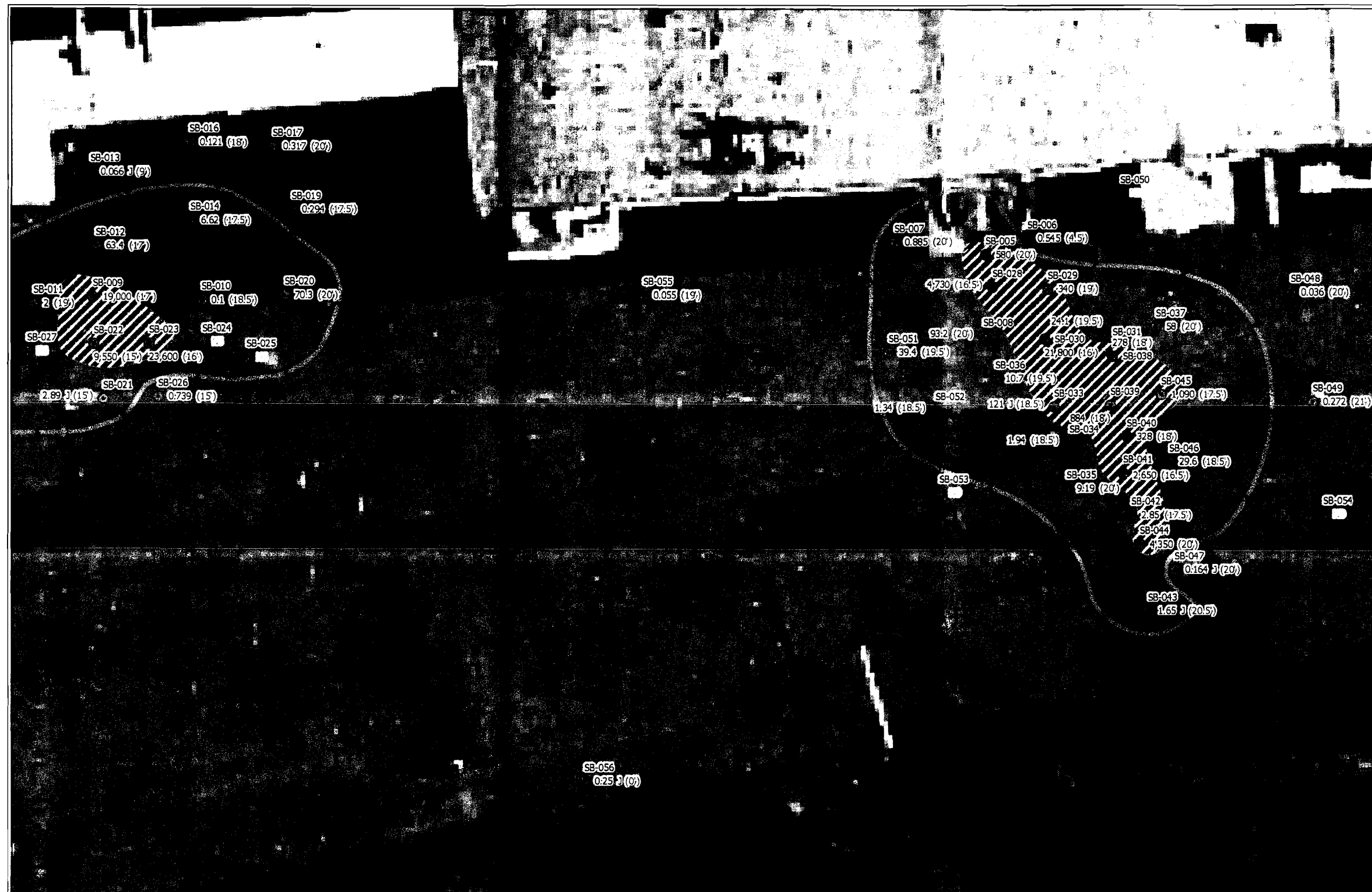


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Revision Number: 006

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Response Engineering and Analytical Contract  
EP-C-04-032  
W.A.# 0-198

**Figure 6**  
**Total VOCs in Soil Samples (mg/kg)**  
**Vestal Chlorinated Hydrocarbon Site**  
**Vestal, New York**





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

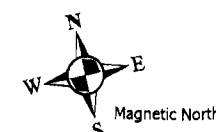
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Coordinate system: New York State Plane (Central)  
FIPS: 3102  
Datum: NAD83  
Units: Feet

1,1,1-TCA : 1,1,1-Trichloroethane

NS : Not Sampled  
J : Estimated Value

NOTE: All concentration values in milligrams per kilogram (mg/kg)  
All depth interval values in feet below ground surface (bgs)

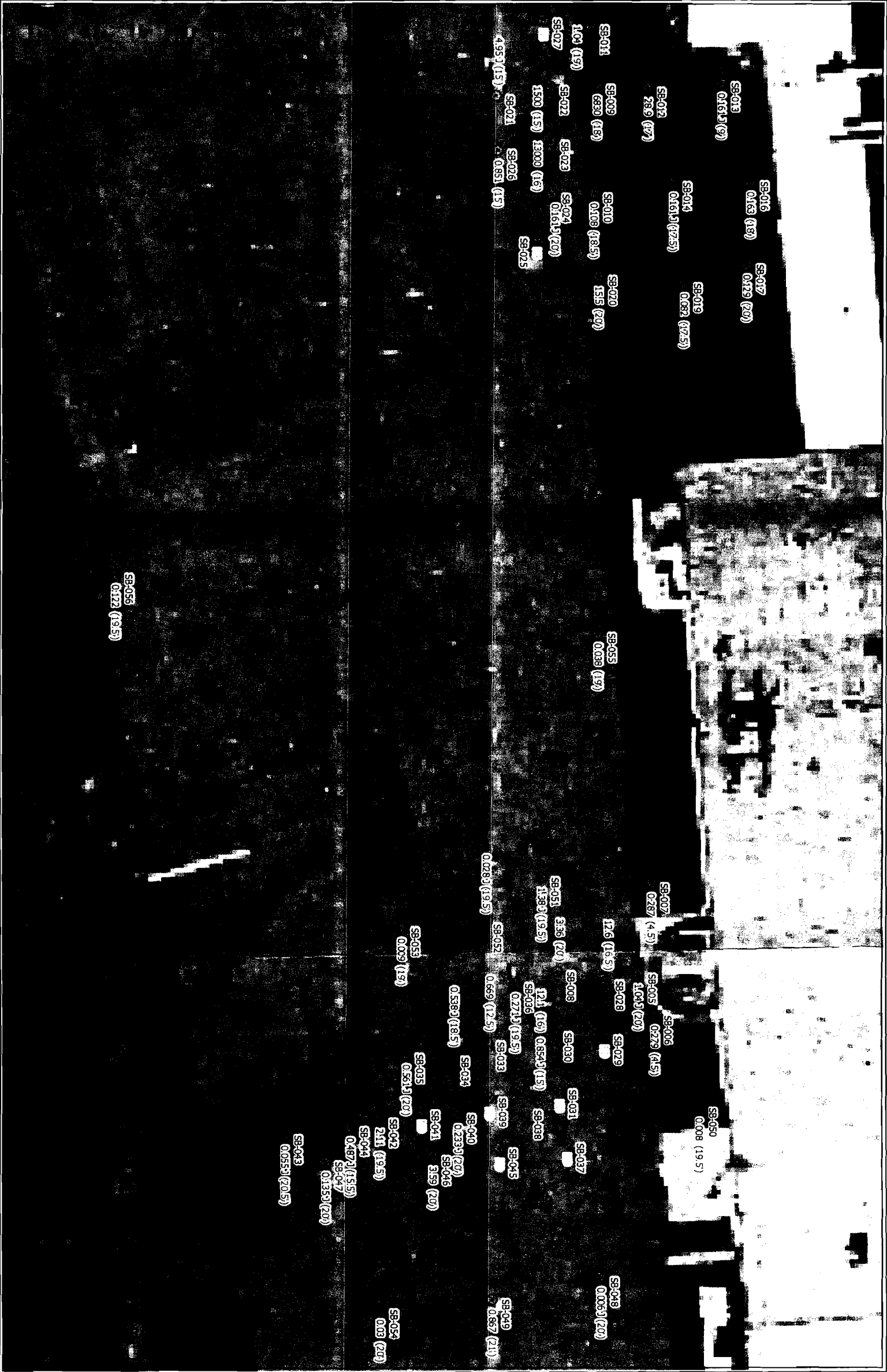
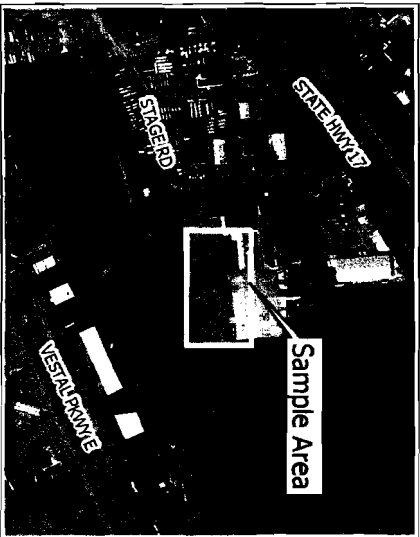
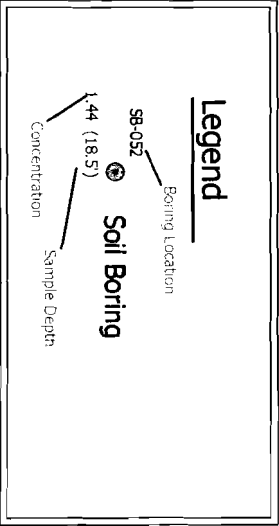
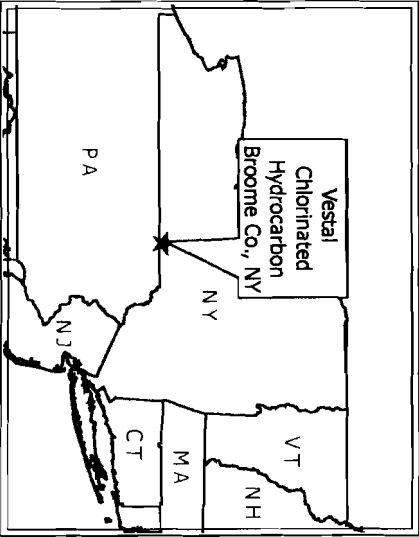


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U.S. EPA Environmental Response Team  
Response Engineering and Analytical Contract  
EP-C-04-032  
W.A.# 0-198

**Figure 7**  
Maximum 1,1,1-TCA Concentration in  
Soil Samples (mg/kg)  
Vestal Chlorinated Hydrocarbon Site  
Vestal, New York





Map created using NY DOT DOQQ (2002) and site survey  
GPS data. GPS collected in Lat., Lon., Decimal Degrees, WGS84  
Map Creation Date: 02October2006  
Coordinate system: New York State Plane (Central)  
FPS: 3102  
Datum: NAD83  
Units: Feet

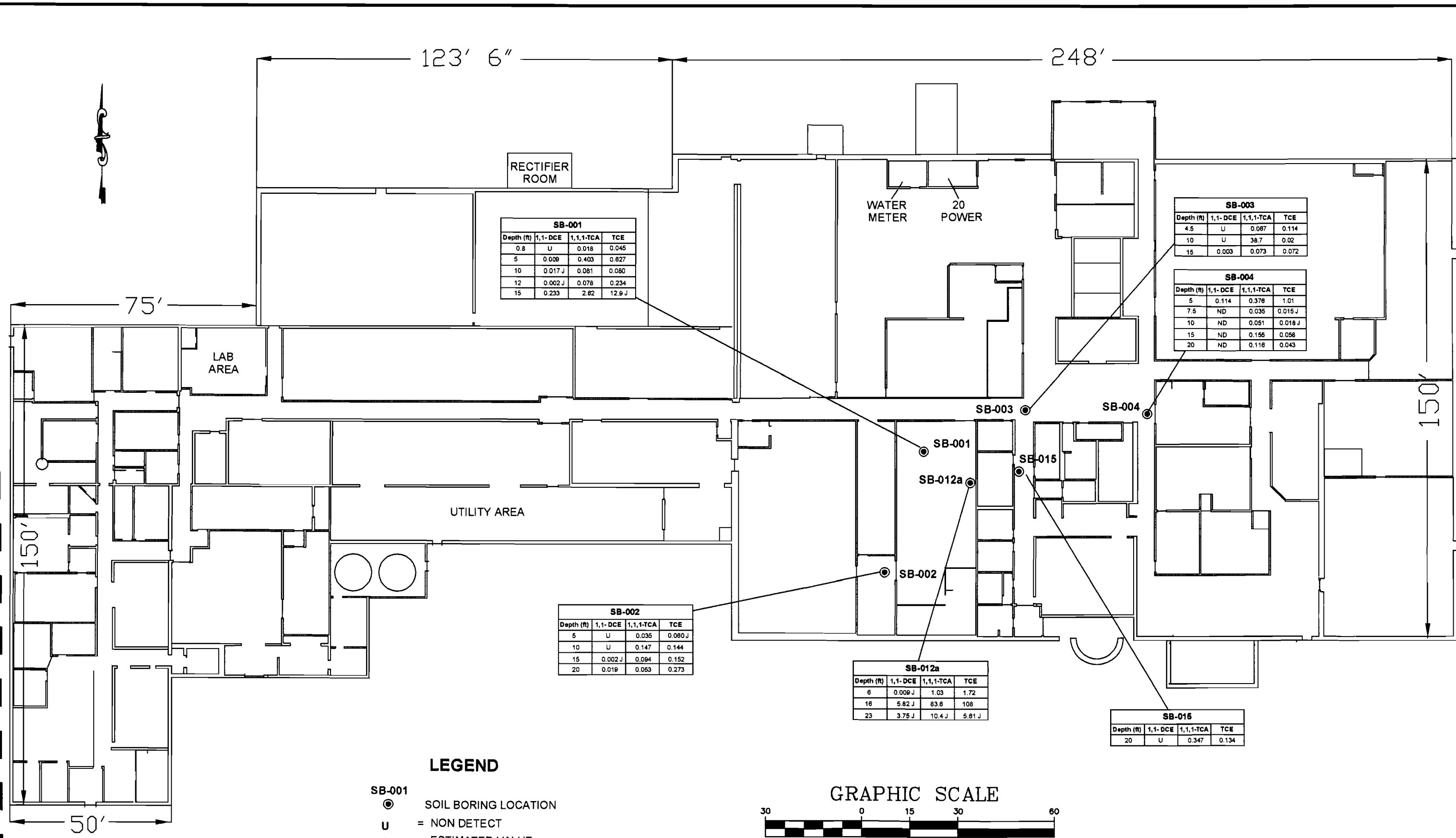
TCE : Trichloroethene  
ND : Non-Detect  
NS : Not Sampled  
J : Estimated Value  
NOTE : All concentration values in milligrams per kilogram (mg/kg)  
All depth interval values in feet below ground surface (bgs)



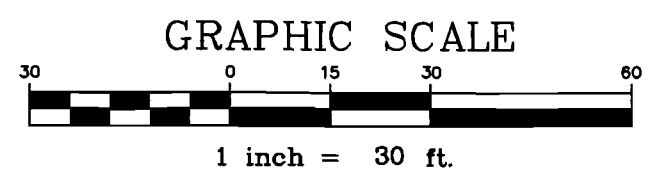
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Revision Number: 005

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

**Figure 9**  
Maximum TCE Concentrations in  
Soil Samples (mg/kg)  
Vestal Chlorinated Hydrocarbon Site  
Vestal, New York



- LEGEND**
- SB-001
  - SOIL BORING LOCATION
  - U = NON DETECT
  - J = ESTIMATED VALUE
  - mg/kg = MILLIGRAMS / KILOGRAM
  - TCE = TRICHLOROETHENE
  - 1,1-DCE = 1,1 - DICHLOROETHENE
  - 1,1,1-TCA = 1,1,1 - TRICHLOROETHENE



Site Plan from:  
American Board Companies Inc.  
rev. 5/13/04

**U.S. EPA ENVIRONMENTAL RESPONSE TEAM**  
**RESPONSE ENGINEERING AND ANALYTICAL CONTRACT**  
EP-C-04-032  
W.A.# 0 - 198

**FIGURE 10**  
**CONCENTRATION OF SELECTED VOCs**  
**IN SOIL SAMPLES -**  
**SITE BUILDING (mg/kg)**  
**VESTAL CHLORINATED HYDROCARBON SITE**  
**VESTAL, NEW YORK**

SB-001			
Depth (ft)	1,1-DCE	1,1,1-TCA	TCE
0.8	U	0.018	0.045
5	0.008	0.403	0.627
10	0.017 J	0.081	0.080
12	0.002 J	0.078	0.234
15	0.233	2.62	12.9 J

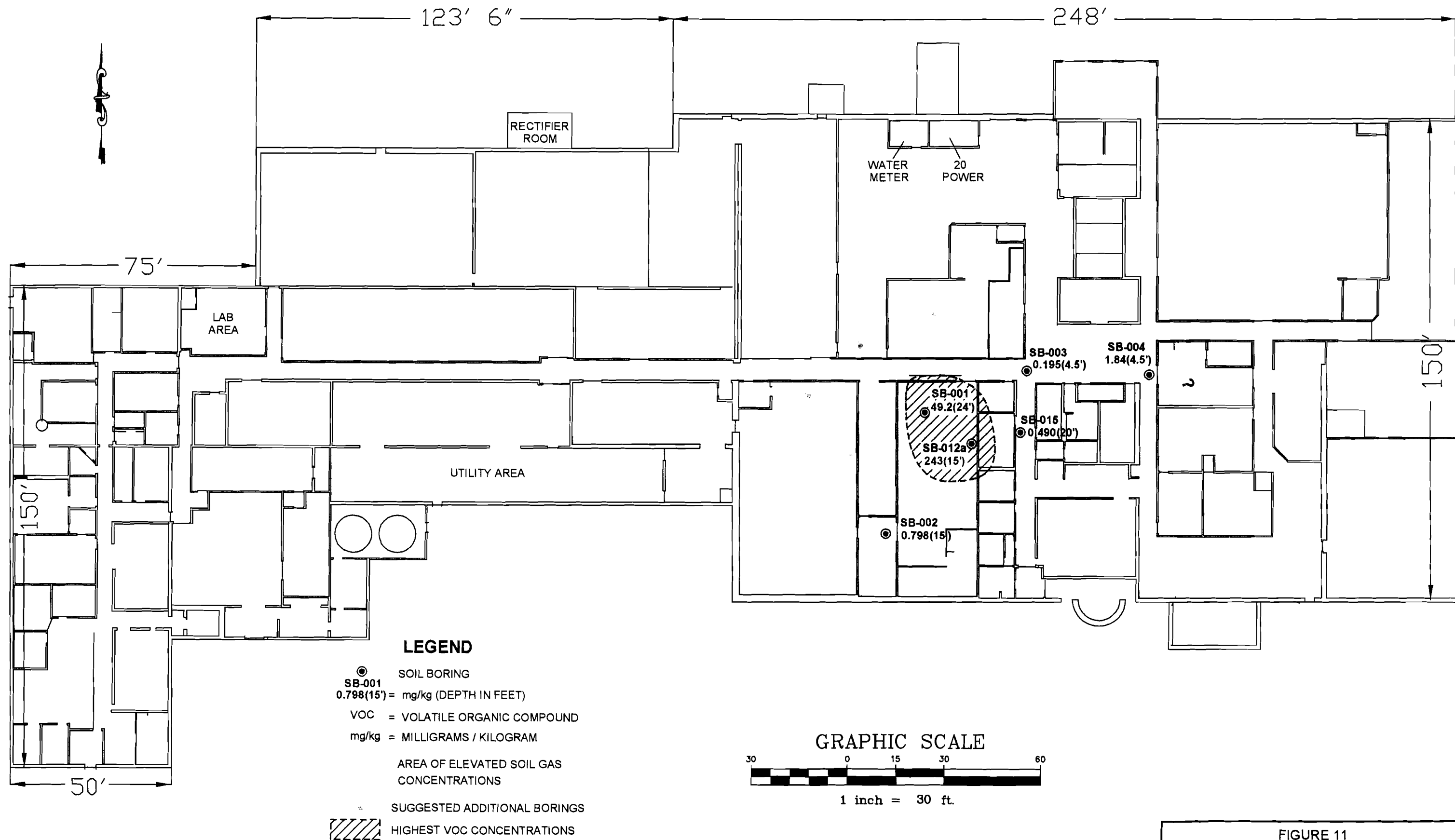
SB-003			
Depth (ft)	1,1-DCE	1,1,1-TCA	TCE
4.5	U	0.087	0.114
10	U	38.7	0.02
15	0.003	0.073	0.072

SB-004			
Depth (ft)	1,1-DCE	1,1,1-TCA	TCE
5	0.114	0.378	1.01
7.5	ND	0.035	0.015 J
10	ND	0.051	0.018 J
15	ND	0.155	0.058
20	ND	0.116	0.043

SB-002			
Depth (ft)	1,1-DCE	1,1,1-TCA	TCE
5	U	0.035	0.080 J
10	U	0.147	0.144
15	0.002 J	0.094	0.152
20	0.019	0.063	0.273

SB-012a			
Depth (ft)	1,1-DCE	1,1,1-TCA	TCE
6	0.009 J	1.03	1.72
16	5.82 J	83.6	108
23	3.75 J	10.4 J	5.81 J

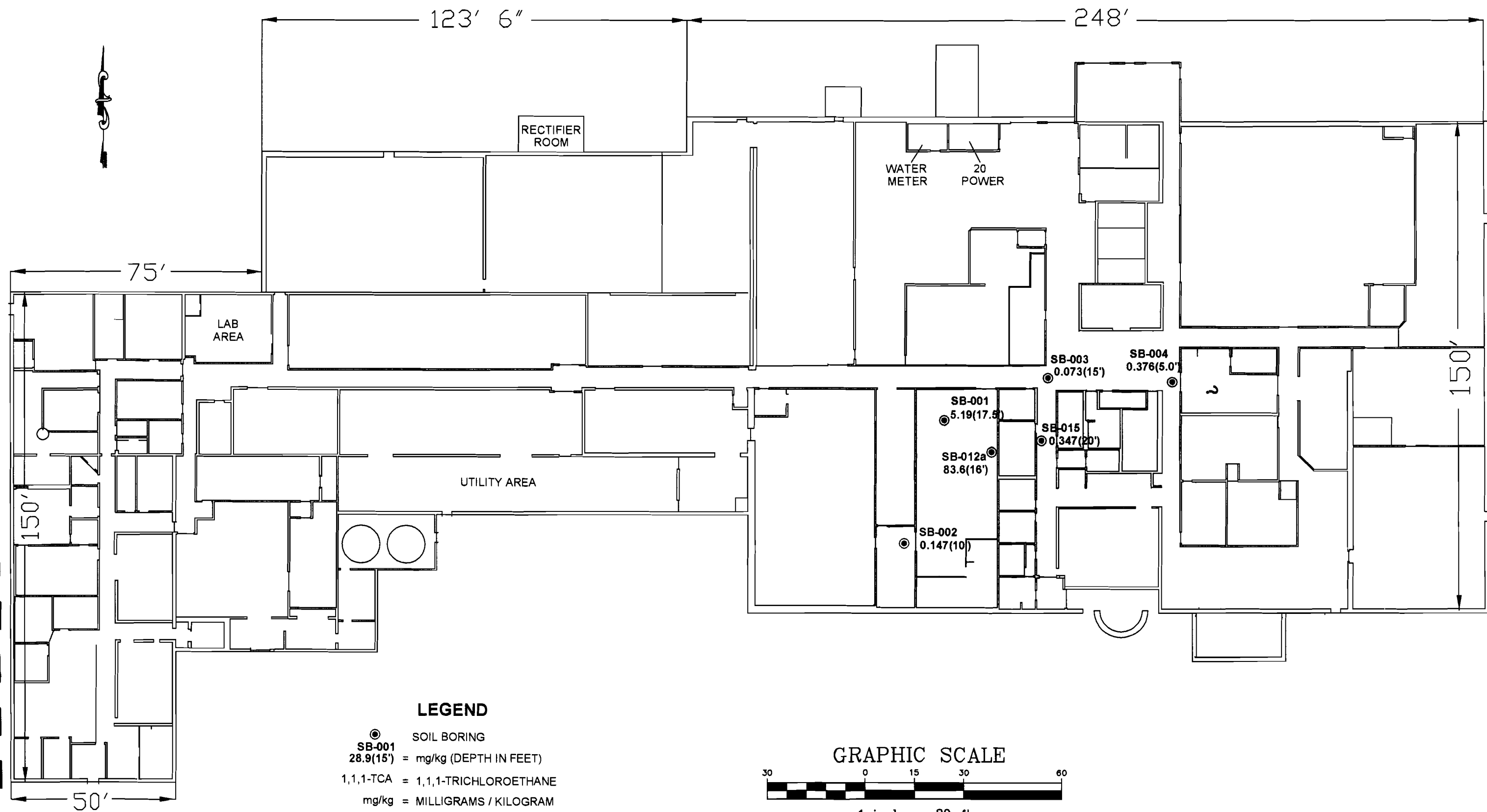
SB-015			
Depth (ft)	1,1-DCE	1,1,1-TCA	TCE
20	U	0.347	0.134



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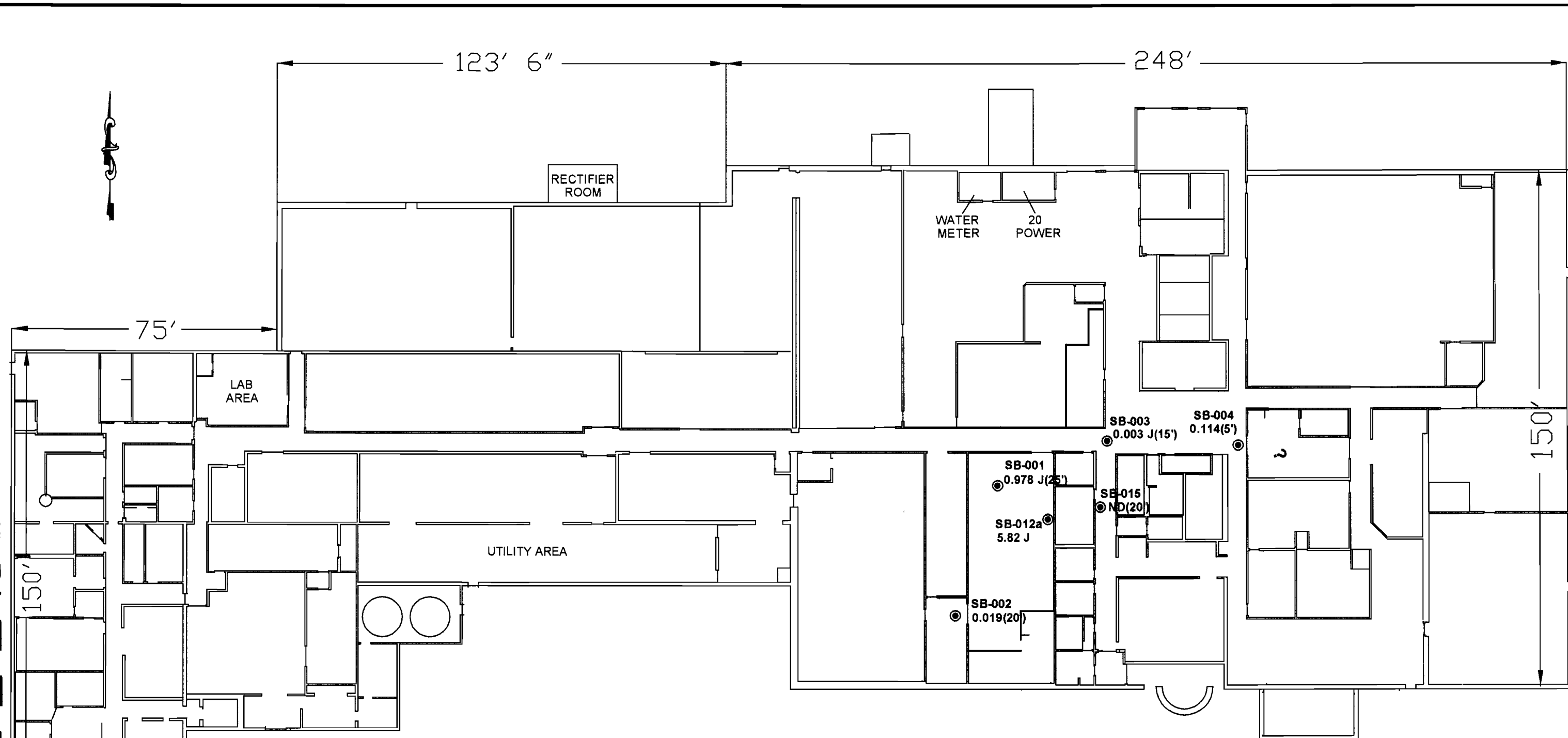
**FIGURE 11**  
MAXIMUM TOTAL VOC CONCENTRATIONS  
IN SOIL SAMPLES (mg/kg)-SITE BUILDING  
VESTAL CHLORINATED HYDROCARBON SITE  
VESTAL, NEW YORK



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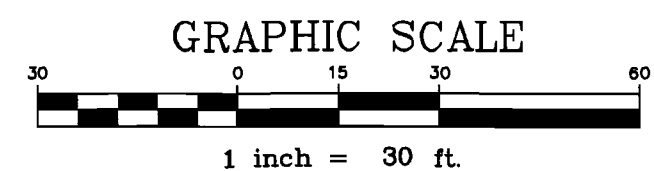
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FIGURE 12  
MAXIMUM 1,1,1-TCA CONCENTRATIONS  
IN SOIL SAMPLES (mg/kg)-SITE BUILDING  
VESTAL CHLORINATED HYDROCARBON SITE  
VESTAL, NEW YORK



**LEGEND**

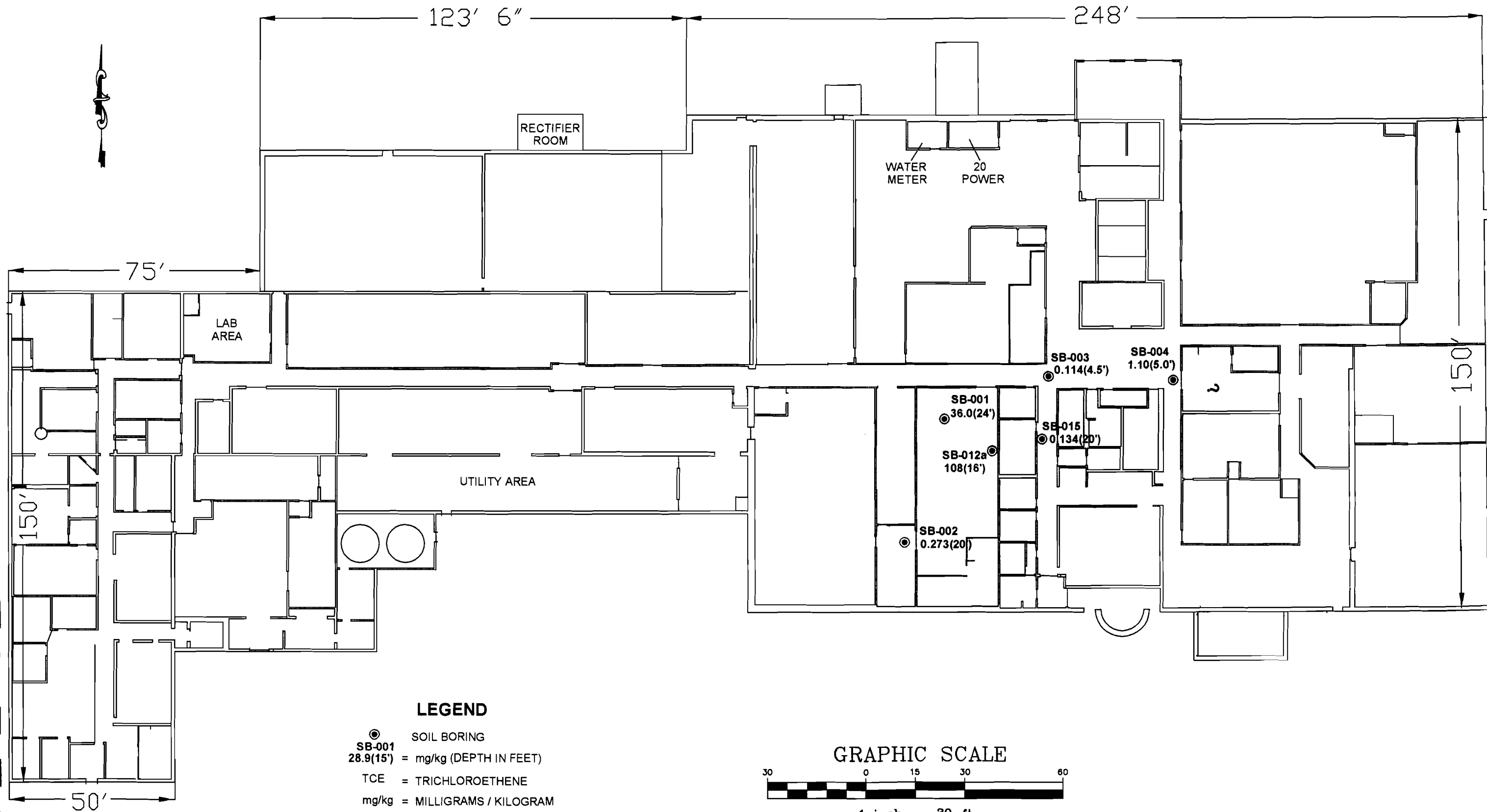
● SB-001  
 28.9(15') = mg/kg (DEPTH IN FEET)  
 1,1-DCE = 1,1-DICHLOROETHENE  
 mg/kg = MILLIGRAMS / KILOGRAM  
 AREA OF ELEVATED SOIL GAS  
 CONCENTRATIONS



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**FIGURE 13**  
 MAXIMUM 1,1-DCE CONCENTRATIONS  
 IN SOIL SAMPLES (mg/kg)-SITE BUILDING  
 VESTAL CHLORINATED HYDROCARBON SITE  
 VESTAL, NEW YORK



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FIGURE 14  
MAXIMUM TCE CONCENTRATIONS  
IN SOIL SAMPLES (mg/kg)-SITE BUILDING  
VESTAL CHLORINATED HYDROCARBON SITE  
VESTAL, NEW YORK



APPENDIX A  
SOIL BORING LOGS  
VESTAL CHLORINATED HYDROCARBON SOURCE ASSESSMENT/REMEDY SITE  
VESTAL, NEW YORK

# CORE DESCRIPTIONS

Depth (feet bgs)	Recovery %	FID - ppm	Lithology
<b>SB-001</b> 0 - 0.25 0.25 - 5.0 5 - 10 10 - 15 15 - 20 20 - 25 25 - 30	 80 10 100 77 47 NA	 20 1 10 - top 50 ppm 14-15 ft 20 - 100 50 - 100 50	Concrete bldg floor FILL - large pebbles, poorly sorted silt and sand SILT, brown to gray, slightly clayey, slightly cohesive, dry SILT, brown, slightly clayey, slightly cohesive, dry to moist SAND, very fine, gray-brown grading downward to clayey SILT, to silty CLAY, cohesive, wet at bottom of interval 20 - 24 ft: SILT, clayey, gray-brown, grading downward to silty CLAY 24 - 25 ft: GRAVEL, coarse, sandy, wet SAND, brown, medium, with large gravel at 29 to 30 ft
<b>SB-002</b> 0 - 5 5 - 10 10 - 15 15 - 20	 72 NA 75 72	 2 - 10 1 - 9 0.5 - 5	Concrete fragments and FILL SILT, brownish-gray, friable to slightly cohesive, slightly clayey, dry, oxidized at bottom of core SILT, brownish-gray, dry, oxidized SILT, brownish-gray, clayey, slightly cohesive, dry to moist
<b>SB-003</b> 0 - 5 5 - 10 10 - 15	 69 33 78	 30 - top 10 - bottom 0.5 0.5	Concrete fragments and FILL SILT, brownish-gray, dry, oxidized SILT, brownish-gray, uniform, friable to slightly clayey, wet
<b>SB-004</b> 0 - 5 5 - 10 10 - 15 15 - 20	 57 68 70 88	 10 - 30 20 ppm 7.5 ft 0 ppm 10 ft 0 0	Concrete fragments and FILL SAND, very fine to SILT, friable, brownish-gray, dry SAND, very fine to SILT, friable, brown, wet at 14 ft SAND, very fine to SILT, friable, brown, wet
<b>SB-005</b> 0 - 5 5 - 10 10 - 15 15 - 20 20 - 25	 47 80 81 78 4	 100 30 ppm at top 0 ppm 6-10 ft 0 1000+ ppm in bottom half of core 3 - 4	0 - 3.5 ft: FILL 3.5 - 5 ft: CLAY, dark gray, silty, cohesive SILT, brown, uniform, dense, slightly clayey, moist SILT, brown, uniform, dense, slightly clayey, wet SILT to very fine SAND, brown, wet SAND and coarse GRAVEL, poorly sorted, saturated
<b>SB-006</b> 0 - 5 5 - 10 10 - 15 15 - 20 20 - 25	 70 77 80 79 47	 0 ppm 0-3 ft 200 ppm 3-4 ft 850 ppm 4-5 ft 0 - 10 0 0 0	SILT, brown, uniform, dense, slightly clayey, dry SILT to very fine SAND, brown, dry SILT, brown, clayey, uniform, dry 15 - 19 ft: SILT to fine SAND 19 - 20 ft: SAND, coarse and large GRAVEL GRAVEL, very large, and coarse SAND, saturated

Depth (feet bgs)	Recovery %	FID - ppm	Lithology
<b>SB-007</b>			
0 - 5	83	0 ppm 0-4 ft 200 ppm 4-5 ft	SILT, brown to clayey SILT, organic, uniform, dry
5 - 10	75	20 ppm 6 ft 0 ppm rest of core	SILT, brown, uniform, dry
10 - 15	80	0	SILT, brown, slightly clayey to fine SAND uniform, dry
15 - 20	73	8 ppm 20 ft 0 ppm rest of core	15-19.2 ft: SILT, brown, slightly clayey to fine SAND uniform 19.2-20 ft: SAND, fine to med. and very coarse GRAVEL, wet
20 - 25	50	4 - 8.5	SAND, fine to medium and very large GRAVEL, angular
<b>SB-008</b>			
0 - 5	53	100 ppm 5 ft	0-0.5 ft: FILL 0.5-5 ft: SILT, gray-brown, clayey, uniform, slightly organic
5 - 10	63	5 - 10	SILT to very fine SAND, brown, uniform, dry
10 - 15	85	0 ppm 10-13 ft 100 ppm 13-15 ft	SILT to very fine SAND, brown, uniform, dry
15 - 20	25	70 - 100+	15-19.5 ft: SILT, brown, slightly clayey 19.5-20 ft: SAND and very large GRAVEL, angular, saturated
20 - 25	61		SAND and very large GRAVEL, angular, saturated
<b>SB-009</b>			
0 - 5	75	1 - 10	0-0.5 ft: FILL 0.5-5 ft: SILT, brown, uniform, dry
5 - 10	85	4 - 8	SILT, brown, uniform, dry
10 - 15	95	300 ppm 10-13 ft 1000 ppm 13-15 ft	SILT to very fine SAND, brown, uniform, dry
15 - 20	78	800 - 1000	15-18.5 ft: SILT to very fine SAND, brown 18.5-20 ft: SAND and very large GRAVEL, angular, saturated
20 - 25	53	10 - 20	SAND and very large GRAVEL, angular, saturated
<b>SB-010</b>			
0 - 5	80	1	SILT to very fine SAND, brown, uniform, dry
5 - 10	86	1	SILT to very fine SAND, brown, uniform, dry
10 - 15	88	1	SILT, brown, uniform
15 - 20	85	8 - 10	15-16 ft: SAND, very fine, brown, moist to wet 16-20 ft: GRAVEL, very large, angular, poorly sorted, saturated
20 - 25	72	10 - 40	GRAVEL, very large, angular, poorly sorted, saturated
<b>SB-011</b>			
0 - 5	NA	0 - 0.5	0-0.5 ft: FILL 0.5-5 ft: SILT, brown, uniform, dry
5 - 10	77	1	SILT to very fine SAND, brown, uniform, slightly clayey, dry
10 - 15	83	1 - 2	SILT to very fine SAND, brown, uniform, dry
15 - 20	38	10 - 30	GRAVEL, very large, angular, poorly sorted, saturated
<b>SB-012</b>			
0 - 5	80	1 - 9	0-1.5 ft: topsoil and fill 1.5-5 ft: SILT, brown, uniform, dry
5 - 10	80	2-10	SAND, brown, very fine, well-sorted, grading downwards to silt
10 - 15	86	20 - 50	SILT to very fine SAND, brown, uniform, dry
15 - 20	NA	100+ ppm 15-17 ft 30 ppm 17-20 ft	15-18.5 ft: SILT, brown, uniform, dry to wet 18.5-20 ft: SAND and very large GRAVEL, angular, saturated

Depth (feet bgs)	Recovery %	FID - ppm	Lithology
<b>SB-012a (Inside Bldg)</b>			
0 - 4	40	2 - 7	Concrete fragments and FILL
4 - 8	57	6 - 7	SILT, brown, uniform, slightly clayey
8 - 12	NA	1 - 2	SAND and GRAVEL, poorly sorted, probably fill fallback
12 - 16	77	20 ppm top of core 500 ppm 16 ft	SILT, brown, uniform, with fine SAND lenses, dry solvent odor
16 - 20			mostly fallback
20 - 24	77	150	SILT, brown, uniform, with fine SAND lenses, dry
<b>SB-013</b>			
0 - 5	73	0 - 10	0-2 ft: topsoil and fill 2-5 ft: SILT to fine SAND, brown, dry
5 - 10	75	70 - 100	SILT, stained dark gray, slightly cohesive, petroleum odor, organic (?) fragments in bottom of core
10 - 15	82	2 - 3	SILT, brown, uniform, with fine sand stringers, grading downward to clayey SILT, moist
15 - 20	67	5 - 10	SILT, clayey, with very fine sand stringers, moist to saturated
<b>SB-014</b>			
0 - 5	88	0	0-1 ft: TOPSOIL 1-5: SILT, brown, uniform, dry
5 - 10	98	0 - 1	SILT, brown to very fine SAND, uniform, dry
10 - 15	87	0	SILT, brown, uniform, with fine sand stringers,
15 - 20	62	10 - 60	15-18.5 ft: SILT, brown, uniform, with fine sand stringers 18.5-20 ft: SAND, medium, brown, well-sorted, saturated
<b>SB-015</b>			
0 - 4	57	2 - 8	0-1 ft: CEMENT fragments 1-4 ft: FILL - poorly sorted sand and gravel
4 - 8	67	5 - 7	SILT, brown, uniform, dry
8 - 12	80	1 - 10	SILT, brown, uniform, moist
12 - 16	61	3 - 10	SILT, brown, uniform, moist
16 - 20	78	2 - 10	SILT, sandy grading downward to fine SAND bottom of core
<b>SB-016</b>			
0 - 5	69	0 - 1	SILT, brown, uniform, dry
5 - 10	88	0 - 1	SILT, brown, uniform, dry
10 - 15	85	0	SILT, brown and fine SAND, weathered fossiliferous rock frag., wet
15 - 20	60	0	15-19 ft: SILT, brown, with fine SAND lenses 19-20 ft: GRAVEL, coarse with SAND, poorly sorted, saturated
<b>SB-017</b>			
0 - 5	83	0	0-1 ft: TOPSOIL, FILL 1-5 ft: SILT, brown, with very fine SAND lenses, dry
5 - 10	83	0	SILT, brown, very slightly sandy, uniform, dry
10 - 15	77	0	SILT, brown, with very fine SAND lenses, wet
15 - 20	58	0	SILT, brown, with very fine SAND lenses, wet
<b>SB-018</b>			
Refusal at 2 ft			
<b>SB-019</b>			
0 - 5	NA	0	0-1 ft: TOP SOIL 1-5 ft: SILT, brown, uniform, dry
5 - 10	NA	0 - 2	SILT, brown, with very fine SAND lenses, slightly clayey, dry
10 - 15	NA	0	SAND, very fine to SILT, brown, slightly clayey
15 - 20	53	0	SILT, brown, with very fine SAND lenses

Depth (feet bgs)	Recovery %	FID - ppm	Lithology
<b>SB-020</b>			
0 - 5	88	0	0-1ft: TOPSOIL
5 - 10	90	0	1-5 ft: SILT, brown, uniform, dry
10 - 15	63	0	SILT, brown, with very fine SAND lenses, dry
15 - 20	53	0-2 ppm 15-17 ft 20-50 ppm 17-20 ft	SILT, slightly clayey, with small fragments of organic matter 15-18.5 ft: SILT and very fine SAND, gray-brown, clayey, oxidized 18.5-20 ft: GRAVEL, very large, and sand, poorly sorted, saturated
<b>SB-021</b>			
0 - 5	78	0.5 - 4	SILT, brown, uniform, dry
5 - 10	98	0 - 1	SILT, brown, uniform, dry
10 - 15	83	10 ppm 13 ft 80-100 ppm 14-15 ft	SILT, brown, slightly clayey, uniform with fine SAND lenses
15 - 20	57	10 - 30	GRAVEL, large, with SAND, poorly sorted
<b>SB-022</b>			
0 - 5	69	4-8 ppm 0-4 ft 20 ppm 4-5 ft	SILT, brown, uniform, dry
5 - 10	100	10 - 25	SILT, brown, uniform, dry
10 - 15	90	300-400 ppm 10-12 ft 1000+ ppm 12-15 ft	SILT, brown, to very fine sand, moist, strong solvent odor
15 - 20	60	1000+ ppm 15-18 ft 400-800 ppm 18-20 ft	GRAVEL, large, with SAND, poorly sorted, saturated
<b>SB-023</b>			
0 - 5	95	1 - 4	SILT, brown, uniform, dry
5 - 10	100	2 - 15	SILT, brown, to very fine sand, uniform
10 - 15	78	100-300 ppm 10-11 ft 1000 ppm 11-15 ft	SILT, brown, oxidized, dry, strong solvent odor
15 - 20	50	1000 + ppm top 100 ppm rest of core	GRAVEL, large, with SAND, poorly sorted, saturated, solvent odor
<b>SB-024</b>			
0 - 5	90	6 - 10	0-0.5 ft: BLACKTOP
5 - 10	100	1 - 2	0.5-5 ft: SILT and very fine SAND, brown, dry
10 - 15	95	1	SAND, very fine, brown, dry SAND, very fine, brown, silty, moist
<b>SB-025</b>			
0 - 5	0	NA	lost core
5 - 10	90	0 - 3	SILT, brown, slightly clayey, dry
10 - 15	75	0	SILT, brown, uniform, moist to wet
<b>SB-026</b>			
5 - 10	98	1 - 2	SAND, very fine, brown, to SILT
10 - 15	85	3 - 10	SAND, very fine, brown, to SILT
<b>SB-027</b>			
5 - 10	77	0	SAND, very fine, brown, to SILT, dry
10 - 15	90	1	SILT, slightly clayey, brown, oxidized, moist
<b>SB-028</b>			
5 - 10	83	2 - 8	SILT to very fine SAND, brown, dry
10 - 15	88	0 - 1	SILT to very fine SAND, brown, moist to wet
15 - 20	80	1000+ ppm 17-19 ft 0-1 ppm 19-20 ft	15-19 ft: SILT, brown, moist to wet 19-20 ft: GRAVEL, coarse with SAND, poorly sorted, saturated

Depth (feet bgs)	Recovery %	FID - ppm	Lithology
<b>SB-029</b>			
5 - 10	87	0 ppm 5-9 ft 10-20 ppm 9-10 ft	SILT, brown, slightly clayey, dry
10 - 15	75	0 - 1	SILT to very fine SAND, brown, moist to wet
15 - 20	77	1000+	SILT, brown, clayey, wet, strong solvent odor, red NAPL (?) stains
20 - 25	40	30	GRAVEL, coarse with SAND, poorly sorted, saturated
<b>SB-030</b>			
5 - 10	83	3 - 10	SILT to very fine SAND, brown, dry
10 - 15	83	10-20 ppm 10-11 ft 1000+ ppm 19-20 ft	SILT brown, with very fine SAND lenses, moist to wet
15 - 20	78	1000+ ppm 15-17 ft 400-500 ppm 17-20 ft	15-19.5 ft: SILT, brown, with fine SAND lenses, black staining 19.9-20 ft: GRAVEL, coarse with SAND, poorly sorted, saturated
<b>SB-031</b>			
5 - 10	80	2- 5	SILT, brown, uniform, dry
10 - 15	95	0 - 5	SILT to very fine SAND, brown
15 - 20	61	2-10 ppm 15-16 ft 20-50 ppm 16-18 ft 1000+ ppm 18-20 ft	15-19.7 ft: SILT to very fine SAND, brown, oxidized 19.7-20 ft: GRAVEL, coarse with SAND, poorly sorted, saturated
<b>SB-032</b>			
5 - 10	78	0.5 - 9	NA
10 - 15	60	1 ppm 10-12 1000+ ppm 13-15 ft	SILT, brown, clayey, uniform, moist
15 - 20	69	100 ppm 15-16 ft 1000+ ppm 16-17 ft 100-400 ppm 17-20 ft	15-19.5 ft: SILT, brown, clayey 19.5-20 ft: GRAVEL, coarse with SAND, poorly sorted, saturated
<b>SB-033</b>			
5 - 10	62	1 - 4	SILT, brown, uniform, dry
10 - 15	NA	2 ppm 10-11 ft 100 ppm 12.5 ft 40 ppm 15 ft	SILT, brown, clayey, oxidized, moist
15 - 20	60	20-40 ppm 15-17 ft 1000+ ppm 17-19.5 ft ~100 ppm 20 ft	15-19.5 ft: SILT, brown, clayey, uniform, wet 19.5-20 ft: GRAVEL, coarse with SAND, poorly sorted, saturated
<b>SB-034</b>			
5 - 10	80	40 ppm 7.5 ft 2-5 ppm rest of core	SILT, brown, uniform, dry
10 - 15	78	0 - 0.5	SILT, brown, slightly clayey at 14-15 ft, oxidized, moist
15 - 20	50	3-10 ppm 15-18 ft 100-150 ppm 18-20 ft	15-18.5 ft: SILT, brown, clayey, uniform, wet 18.5-20 ft: GRAVEL, coarse with SAND, poorly sorted, saturated
<b>SB-035</b>			
5 - 10	80	60-80 ppm 7.5 ft 0-4 ppm rest of core	SAND, very fine to SILT, brown, uniform, dry
10 - 15	70	0 - 0.5	SILT, brown, slightly clayey, oxidized, moist to dry
15 - 20		0-10 ppm 15-17.5 ft 40 ppm 20 ft	15-19 ft: SILT, brown, clayey, sandy, wet 19-20 ft: GRAVEL, coarse, with SAND, poorly sorted, saturated
<b>SB-036</b>			
5 - 10	65	10-15 ppm 5-9 ft 1 ppm 9-10 ft	SAND, very fine to SILT, brown, uniform, dry
10 - 15	78	1 - 2	SILT, brown, slightly clayey, oxidized, dry
15 - 20	78	1-10 ppm 15-17 ft 100-150 ppm 17-20 ft	15-19 ft: SILT, brown, clayey, wet 19-20 ft: GRAVEL, coarse, with SAND, poorly sorted, saturated

Depth (feet bgs)	Recovery %	FID - ppm	Lithology
<b>SB-037</b>			
5 - 10	78	5 - 20	SAND, very fine to SILT, brown, uniform, dry
10 - 15	98	0	SILT to very fine SAND, brown, clayey, wet
15 - 20	NA	0-2 ppm 15-19.5 ft 100 ppm 19.5-20 ft	SILT to very fine SAND, brown, oxidized, clayey, wet
20 - 25	40	1	GRAVEL, med. to very large, sub-rounded to angular, saturated
<b>SB-038</b>			
5 - 10	72	100 ppm 5.5 ft 1-20 ppm rest of core	SAND, very fine grading downwards to SILT, brown, clayey, dry
10 - 15	78	10-40 ppm 10-12.5 ft 1000+ ppm 12.5-15 ft	SILT to very fine SAND, brown, clayey, dk staining at 14-15 ft
15 - 20	80	700 - 1000	SILT, clayey, brown, wet, solvent odor
<b>SB-039</b>			
5 - 10	78	20 - 40	SILT to very fine SAND, brown, dry
10 - 15	78	~10 ppm top half core 20-90 ppm 12.5-15 ft	SILT to very fine SAND, brown, becoming clayey 14-15 ft
15 - 20	75	300-800 ppm 15-16 ft 1000+ ppm 16-19.5 ft 150 ppm 19.5-20 ft	15-19 ft: SILT, brown, clayey with some gray laminae, oxidized but also stained 19-20 ft: GRAVEL, coarse, with SAND, poorly sorted, saturated
<b>SB-040</b>			
5 - 10	70	2 - 10	SILT to very fine SAND, brown to gray, dry
10 - 15	83	2 - 8	SILT to very fine SAND, brown to gray, slightly clayey
15 - 20	60	470 ppm 15-17 ft 1000 ppm 17-19 ft 100 ppm 19-20 ft	15-19.2 ft: SILT, clayey, brown, clayey, wet 19.2-20 ft: GRAVEL, coarse, with SAND, poorly sorted, saturated
<b>SB-041</b>			
5 - 10	90	20 ppm 5-6 ft 1-4 ppm 6-10 ft	5-5.5 ft: SILT, gray-brown, with rootlets 5.5-10 ft: SILT to very fine SAND, brown, oxidized dry
10 - 15	80	1 - 2	SILT, brown to gray, clayey, oxidized,
15 - 20	80	2-3 ppm 15-16 ft 1000+ ppm 16.5 100-150 ppm 17-20 ft	15-18.5 ft: SILT, brown to gray, clayey, oxidized, wet 18.5 -20 ft: GRAVEL, very coarse, sub-rounded to angular, poorly sorted, saturated
<b>SB-042</b>			
5 - 10	80	1 - 10	SILT, brown to gray, oxidized, dry
10 - 15	83	2 ppm 10-11 ft 10-20 ppm 11-15 ft	SAND, very fine, grading downward to SILT, brown to gray, oxidized, moist
15 - 20	67	80-100 ppm 15-16.5 ft 1000+ ppm 16.5-19 ft 200 ppm 19-20 ft	
<b>SB-043</b>			
5 - 10	82	0 - 5	5-6 ft: CLAY, gray, grading downwards to SILT, gray 6-10 ft: SILT, gray to very fine SAND, moist
10 - 15	80	0 - 2	CLAY, gray to SILT with some root/plant fragments, sparingly micaceous, moist
15 - 20	83	0 - 1	CLAY, gray, silty 15-16 ft, grading downwards to SILT, micaceous, with some root/plant fragments
20 - 25	58	1 - 10	20-20.5 ft: CLAY, gray to SILT, dense, saturated 20.5-25 ft: GRAVEL, small to very coarse, sub-rounded to angular

Depth (feet bgs)	Recovery %	FID - ppm	Lithology
<b>SB-044</b>			
5 - 10	78	7-10 ppm 5-7.5 ft 0-1 ppm 7.5-10 ft	SILT, gray, to gray-brown, highly oxidized, friable, dry
10 - 15	47	0 - 7	SILT, gray, to gray-brown, highly oxidized, slightly clayey, dry to moist
15 - 20	78	230 ppm 15-17.5 ft 1000 ppm 17.5-20 ft	SILT, gray to silty CLAY, massive with rare organic fragments GRAVEL, very coarse, sub-rounded to angular, saturated
20 - 25			
<b>SB-045</b>			
5 - 10	80	0 - 4	SILT to very fine SAND, reddish-brown, oxidized, dry to moist
10 - 15	85	0 - 2	SILT, brown to gray, clayey, oxidized, moderately cohesive
15 - 20	63	100 ppm 15-15.5 ft 1000+ ppm 15.5-19 ft 500-700 ppm 19-20 ft	15-18 ft: SILT, clayey, brown 18-19.5 ft: SILT, clayey, gray, oxidized with dark brown staining 19.5-20 ft: GRAVEL, very coarse, sub-rounded to angular, saturated
<b>SB-046</b>			
5 - 10	80	20 - 60 ppm 5-9 ft 1 - 2 ppm 9-10 ft	SAND, very fine, brown, grading downwards to SILT, brown, mottled, oxidized, dry
10 - 15	80	0 - 2	SILT, clayey, brown to gray, highly oxidized, dry to moist
15 - 20	61	9-10 ppm 15-16 ft 1000+ ppm 16-19 ft 150-300 ppm 19-20 ft	SILT, brown to gray, clayey, oxidized, moist to wet
<b>SB-047</b>			
5 - 10	93	10 ppm 5-6 ft 0 ppm 6-10 ft	SILT, brown to gray, oxidized, dry
10 - 15	89	0 - 1	SILT, gray, clayey, moderately cohesive
15 - 20	83	1 - 3	CLAY, silty, to clayey SILT, gray, uniform, massive
<b>SB-048</b>			
5 - 10	95	7 - 10 ppm 5-9 ft 1 ppm 9-10 ft	SILT, with some very fine SAND, gray-brown, oxidized, dry
10 - 15	67	15 ppm 10 ft 1 ppm 11-15 ft	SILT, brown with some very fine SAND, slightly clayey oxidized 10-12.5 feet, moist
15 - 20	99	2	SILT, gray, clayey, grading downwards to sandy and clayey silt, rare woody fragments
<b>SB-049</b>			
15 - 20	75	0	SILT, brown, clayey, oxidized, grading downwards to gray clayey silt
20 - 25	50-58 (?)		top 10-in: SILT, gray, clayey remainder of core: GRAVEL, large, poorly sorted, saturated
<b>SB-050</b>			
5 - 10	95	10-15 ppm 5-9 ft 0 ppm 9-10 ft	SILT, brown, sandy, dry
10 - 15	70	0 - 1	SILT, brown, very slightly clayey, oxidized, moist
15 - 20	90	0 - 1	SILT, brown, clayey, very slightly sandy, saturated



Depth (feet bgs)	Recovery %	FID - ppm	Lithology
<b>SB-051</b>			
5 - 10	75	10 ppm 5-9.5 ft 2 ppm 9.5-10 ft	SILT, brown, slightly sandy, uniform, dry
10 - 15	80	0 - 1	SAND, very fine, brown, grading downwards to SILT, occasional gray clasts
15 - 20	63	0 ppm 15-19.5 20-30 ppm 19.5-20	15-19.5 ft: SILT, brown, clayey, oxidized, wet 19.5-20 ft: GRAVEL, large, sub-rounded to angular, poorly sorted
<b>SB-052</b>			
5 - 10	63	10 ppm 5-6 ft 50-60 ppm 6-8 ft 1-0 ppm 8-10 ft	SAND, very fine, well-sorted, brown, grading downwards to SILT
10 - 15	75	1	SILT, brown, clayey, moist
15 - 20	67	0 ppm 15-19.5 ft 100 ppm 19.5-20 ft	SILT, brown to gray, clayey, oxidized 19.5-20 ft: GRAVEL, large, sub-rounded to angular, poorly sorted
<b>SB-053</b>			
5 - 10	78	20-40 ppm 5-8 ft 0 ppm 8-10 ft	SAND, very fine, brown, grading downwards to SILT, oxidized
10 - 15	73	0 - 4	SILT, brown to gray, clayey, oxidized, moderately cohesive, moist
15 - 20	77	0	15-19.5 ft: SILT, brown, clayey, oxidized 19.5-20 ft: GRAVEL, large, sub-rounded to angular, poorly sorted
<b>SB-054</b>			
5 - 10	88	20 ppm 5-6 ft 1-2 ppm 6-10 ft	5-6.5 ft: SILT, gray-brown, friable 6.5-10 ft: SILT, gray, clayey, oxidized, moist
10 - 15	59	0 - 4	6.5-10 ft: SILT, gray, clayey, oxidized, moist
15 - 20	83	0 - 1	SILT, brown, clayey, grading downwards to CLAY, gray, silty, cohesive, massive
<b>SB-055</b>			
5 - 10	73	0 - 1	SILT, brown, grading downwards to very fine SAND, well-sorted, silty
10 - 15	85	0 - 2	SILT, brown to gray, oxidized, moist to wet
15 - 20	71	0 - 3	15-19 ft: SILT, brown, clayey, oxidized, wet 19-20 ft: GRAVEL, large, sub-rounded to angular, poorly sorted
<b>SB-056</b>			
5 - 10	78	0 - 1	SILT, brown oxidized, dry
10 - 15	77	0	SILT, brown, some gray mottling, slightly clayey, oxidized
15 - 20	55	0	NA

bgs = below ground surface

FIF = flame ionization detector

NA = not available

ppm = parts per million

APPENDIX B  
FINAL ANALYTICAL RESULTS  
VESTAL CHLORINATED HYDROCARBON SOURCE ASSESSMENT/REMEDY SITE  
VESTAL, NEW YORK

J = estimated value



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LOCKHEED MARTIN



DATE: November 30, 2006

TO: R. Singhvi EPA/ERT

FROM: V. Kansal Analytical Section Leader

*Vinod Kansal*

SUBJECT: DOCUMENT TRANSMITTAL UNDER WORK ASSIGNMENT # 0-1198

Attached please find the following document prepared under this work assignment:

Vestal Chlorinated Hydrocarbon Source Assessment/Remedy - Analytical Report

Central File WA # 0-198  
T. Johnson

K. Woodruff  
J. Soroka

(w/attachment)  
Work Assignment Manager  
(w/attachment)  
Task Leader (w/attachment)  
Data Validation and Report Writing  
Group Leader (w/ attachment)



ANALYTICAL REPORT

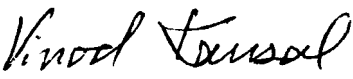
Prepared by  
LOCKHEED MARTIN, Inc.

Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Vestal, NY

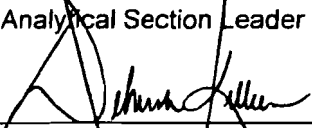
November 2006

EPA Work Assignment No. 0-198  
LOCKHEED MARTIN Work Order EAC00198  
EPA Contract No. EP-C-04-032

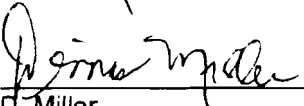
Submitted to  
T. Johnson  
EPA-ERT

  
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Chains of Custody

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Appendices will be furnished on request.



### Introduction

REAC personnel in response to WA-0-198, provided analytical support for environmental samples collected from the Vestal Chlorinated Hydrocarbons Site, located in Vestal, NY as described in the following table. The support also included QA/QC, data review, and preparation of an analytical report containing a summary of the analytical and the QA/QC results.

The samples were treated with procedures consistent with those specified in SOP #1008.

COC #	Number of Samples	Sampling Date	Date Received	Matrix	Analysis/ Method	Laboratory	Data Package
0-198-000-09	12	08/21/06	08/23/06	Soil	VOC/REAC SOP 1807	REAC <sup>1</sup>	R 399
0-198-000-10	13	08/22/06	08/23/06				
0-198-000-11	10	08/22-23/06	08/24/06				
0-198-000-12	15	08/23-24/06	08/25/06				
0-198-000-13	11	08/25/06	08/28/06				
0-198-000-14	15	09/05/06	09/08/06	Water	VOC/REAC SOP 1806		R 396
	17	09/06/06	09/08/06				
	1	09/06/06	09/08/06				
0-198-000-15	6	09/07/06	09/08/06	Soil	VOC/REAC SOP 1807		R 398
	6	09/07/06	09/08/06				
0-198-000-11	9	08/22-23/06	08/24/06				
0-198-000-12	2	08/23-24/06	08/25/06				
0-198-000-13	24	08/25/06	08/28/06				
	6	08/25/06	08/28/06	Water	VOC/REAC SOP 1806		

<sup>1</sup>REAC Analytical Laboratory is NELAP certified.

### Case Narrative

The data in this report have been validated to three significant figures. Any other representation of the data is the responsibility of the user. Values less than 25 percent of the reporting limits for organic analyses have not been reported.

#### VOC in Soil and Water Package R 396

The Soil Blank A091506-2 contained 1,1,1-trichloroethane. Sample numbers 15166, 15161, 15163 and

15164 contained 1,1,1-trichloroethane at less than five times the blank concentration and are reported as non detects.

For continuing calibration verification (09/09/06), acetone exceeded the percent difference criteria. Acetone results in associated samples 15185 and 15190 are reported as estimated (J).

Percent surrogate recovery for 1,2-dichloroethane-d4 did not meet QC limits for several samples. 1,1-dichloroethane results in samples 15157 and 15179; 1,1,1-trichloroethane results in samples 15157, 15179, 15177 and 04112; acetone in sample 15179; 1,1-dichloroethene in sample 15179; and trichloroethene in sample 15179 and 15177 are estimated (J).

For sample number 15164, the internal standard areas for bromochloromethane, 1,4-difluorobenzene and chlorobenzene-d5 were below 50% on the initial run and re-analysis probably due to the matrix. Results for trichloroethene are reported as estimated (J) and the remaining analytes are rejected (R).

Result for 1,1,1-trichloroethane in sample 15165 exceeded the linear calibration range; the concentration of this compound is estimated (J).

#### VOC in Soil Package R 399

The glass jar containing sample 19168 was received broken. The results for this sample should be used with caution.

Soil Blank, B082706-3, contained 7.52 µg/kg acetone: the acetone results for samples 23877, 23739 and 23873 are reported as non-detects.

2-Butanone, bromoform, 4-methyl-2-pentanone, 2-hexanone, 1,2 dibromo-3-chloropropane, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene and 1,2,3-trichlorobenzene did not pass the percent difference QC limits for the continuing calibration on 8/27/06. 1,2,4-trichlorobenzene and naphthalene results in sample 23879 are reported as estimated (J).

Surrogate 1,2-dichloroethane-d4 recovery in sample 23881 was above the QC limits.

Trichlorofluoromethane, acetone, 1,1-dichloroethane, carbon tetrachloride, tetrachloroethene, chlorobenzene, isopropyl benzene, 1,1,2,2-tetrachloroethane, n-propylbenzene, 1,3,5-trimethylbenzene, p-isopropyltoluene, 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, naphthalene are reported as estimated (J).

Surrogate 1,2-dichloroethane-d4 recovery in sample 00396 was above the QC limits. Methylene chloride, 1,1,2-trichloroethane, toluene, tetrachloroethene, p+m-xylenes, o-xylene, n-propylbenzene, 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,2,4-trichlorobenzene and 1,2,3-trichlorobenzene are reported as estimated (J).

The following samples contained compounds which were outside the linear range of the calibration. Analysis of the diluted samples did not match the original results. The original results are reported as estimated (J). The relevant samples and compounds are as follows:

Sample Number	Compounds
04186	cis-1,2-dichloroethene and toluene
04187	1,1-dichloroethene and toluene
19157	cis-1,2-dichloroethene
23882	1,1-dichloroethene, 1,1,1-trichloroethane and trichloroethene
23881	1,1-dichloroethene, cis-1,2-dichloroethene and toluene
00393	1,1,1-trichloroethane and trichloroethene

1,1-Dichloroethene, cis-1,2-dichloroethene, 1,1,1-trichloroethane and toluene concentrations in sample 04199 were above the linear range of the calibration. The diluted sample concentrations were below the reporting limits. The undiluted sample results were reported as estimated (J).

1,1,1-Trichloroethane concentration in sample 00396 exceeded the linear calibration range. 1,1,1-Trichloroethane result in this sample is reported as estimated (J).

The following compounds, 1,1-dichloroethene, chloroform, 1,1,2-trichloroethane, toluene, tetrachloroethene, ethylbenzene, p&m- xylenes, o-xylenes, 1,2,4-trimethyl benzene and naphthalene in sample number 00399, upon dilution were either diluted out or were below the reporting limit. The initial analysis results are reported as estimated (J).

Sample 23880 had possible carryover from the previous sample analysis. 1,1,1-Trichloroethane and trichloroethene results are reported as estimated (J) for this sample.

MS/MSD recovery for trichloroethene was outside the QC limits; trichloroethene result in sample 04131 is reported as estimated(J). MSD recovery for trichloroethene in sample 19154 was outside the QC limits and is reported as estimated (J).

MS/MSD recovery for trichloroethene was below 20% in sample 04185. Trichloroethene is reported as estimated (J).

Trichloroethene MS result was above the QC limits for 00394. Trichloroethene is reported as estimated (J) for this sample.

#### VOC in Soil and Water Package R 393

Water method blank A-083106-3 contained 1,1,1-trichloroethane. Concentration of 1,1,1-trichloroethane in sample 23893 was reported as estimated (J).

In the initial calibration of 08/28/06 percent relative standard deviation for acetone exceeded the QC criteria. Since an acceptable linear regression was not done for acetone, the acetone concentration is estimated (J) for the associated samples 15136 and 15140.

In the initial calibration of 08/30/06 percent relative standard deviation for vinyl chloride exceeded the QC criteria. Since an acceptable linear regression was not done for vinyl chloride, the vinyl chloride concentration is estimated (J) for samples 23892, 23893 and 23890.

Percent difference for chloroethane and 2,2-dichloropropane exceeded the qualifying criteria in the continuing calibration of 09/06/06. The 2,2-dichloropropane results in samples 23885, 00395, 23891, 00625, 00626, 00629, 00627, 23897, 00365, 23895 and methanol blank MBLK-090606-1 are estimated (UJ).

In the continuing calibration of 09/07/06 percent difference for chloroethane, acetone, trichlorofluoromethane and 2,2-dichloropropane exceeded the QC criteria. The trichlorofluoromethane result is estimated (J) for sample 23886

The percent recovery exceeded acceptable QC criteria for surrogate p-bromofluorobenzene in samples 19167/1000x and 15141/50x; and the surrogate 1,2-dichloroethane-d4 in samples 23892, 00397/1000x, 00366/1000x, 00366/2000x, 00397/250C, 23896/1000x and 00385/1000x. Analytes are estimated (J) in the following samples:

- The concentration of 1,1,1-trichloroethane is estimated for samples 00366, 00385, 00397, 15141, 19167 and 23896.
- The concentration of 1,1-dichloroethene is estimated for samples 00366, 00397 and 23896.
- The concentration of trichloroethene is estimated for samples 00397 and 15141.
- The concentration of 1,1-dichloroethane is estimated for sample 00397.
- The concentration of vinyl chloride, chloromethane, chloroethane, trans-1,2-dichloroethene, 2-butanone, benzene, tetrachloroethene, chlorobenzene, 1,1,1,2-tetrachloroethane, ethylbenzene, p&m-xylenes, o-xylene, 1,1,2,2-tetrachloroethane, n-propylbenzene, 1,3,5-trimethylbenzene,

1,2,4-trimethylbenzene, 1,4-dichlorobenzene, 1,2-dichlorobenzene, 1,2,4-trichlorobenzene, and naphthalene in sample 23892.

The following analytes are estimated (J) in the following samples since the linear calibration range was exceeded for sample 23892: methylene chloride, cis-1,2-dichloroethene, chloroform, 1,1,1-trichloroethene and toluene and for sample 23890: chloroethane and cis-1,2-dichloroethene

Based on professional judgement acetone in samples 00366, 00389, 00390 and 00383 through 00387 is rejected (R) since the sample results linearly increase with dilution and are probably an artifact. The methylene chloride concentration in sample 23718 is also rejected (R) because the sample results vary with dilution and is probably an artifact.

### Summary of Abbreviations

B	Analyte was found in the blank				
BFB	Bromofluorobenzene				
cont.	Continued				
D	(Surrogate Table) value is from a diluted sample and was not calculated (Result Table) result was obtained from a diluted sample				
Dioxin	Polychlorinated Dibenzo-p-dioxins (PCDD) and Polychlorinated Dibenzofurans and/or PCDD and PCDF				
CLP	Contract Laboratory Procedure				
COC	Chain of Custody				
CRDL	Contract Required Detection Limit				
CRQL	Contract Required Quantitation Limit				
DFTPP	Decafluorotriphenylphosphine				
E	Value is greater than the highest linear standard and is estimated				
EMPC	Estimated maximum possible concentration				
J	Value is estimated				
J+	Value is estimated high				
J-	Value is estimated low				
LCS	Laboratory Control Sample				
LCSD	Laboratory Control Sample Duplicate				
MS (BS)	Matrix Spike (Blank Spike)				
MSD (BSD)	Matrix Spike Duplicate (Blank Spike Duplicate)				
MW	Molecular Weight				
NA	Not Applicable or Not Available				
NC	Not Calculated				
NR	Not Requested				
NS	Not Spiked				
% D	Percent Difference				
% Rec.	Percent Recovery				
ppbv	parts per billion by volume				
ppm	parts per million				
PQL	Practical Quantitation Limit				
QA/QC	Quality Assurance/Quality Control				
QL	Quantitation Limit				
R	Value is unusable				
RL	Reporting Limit				
RPD	Relative Percent Difference				
RSD	Relative Standard Deviation				
SIM	Selected Ion Monitoring				
Surr	Surrogate				
TCLP	Toxic Characteristics Leaching Procedure				
U	Not detected				
m <sup>3</sup>	cubic meter	kg	kilogram	µg	microgram
L	liter	g	gram	pg	picogram
mg	milligram	ng	nanogram	µL	microliter
*	Value exceeds the acceptable QC limit				

Revision 9/21/06

Table 1.1 Result of the Analysis for VOC in Water  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

Method: REAC SOP 1806

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Sample No.	Water Blank 8 090906-2		15185		15188		15193		15190	
Location:			MW-005 25-30'		MW-A		MW-A dup		MW-G	
Dilution Factor	1		100		1		1		100	
Analyte	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	500	U	5.00	U	5.00	U	500
Chloromethane	U	5.00	U	500	U	5.00	U	5.00	U	500
Vinyl Chloride	U	5.00	U	500	U	5.00	U	5.00	U	500
Bromomethane	U	5.00	U	500	U	5.00	U	5.00	U	500
Chloroethane	U	5.00	U	500	U	5.00	U	5.00	U	500
Trichlorofluoromethane	U	5.00	U	500	U	5.00	U	5.00	U	500
Acetone	U	20.0	2140 J	2000	U	20.0	U	20.0	2380 J	2000
1,1-Dichloroethane	U	5.00	1250	500	2.10 J	5.00	2.20 J	5.00	U	500
Methylene Chloride	U	5.00	U	500	U	5.00	U	5.00	U	500
Carbon Disulfide	U	5.00	U	500	U	5.00	U	5.00	U	500
Methyl-t-butyl Ether	U	5.00	U	500	U	5.00	U	5.00	U	500
trans-1,2-Dichloroethene	U	5.00	U	500	U	5.00	U	5.00	U	500
1,1-Dichloroethane	U	5.00	244 J	500	3.93 J	5.00	4.04 J	5.00	U	500
2-Butanone	U	5.00	U	500	U	5.00	U	5.00	U	500
2,2-Dichloropropane	U	5.00	U	500	U	5.00	U	5.00	U	500
cis-1,2-Dichloroethene	U	5.00	U	500	U	5.00	U	5.00	U	500
Chloroform	U	5.00	U	500	U	5.00	U	5.00	U	500
1,1-Dichloropropene	U	5.00	U	500	U	5.00	U	5.00	U	500
1,2-Dichloroethane	U	5.00	U	500	U	5.00	U	5.00	U	500
1,1,1-Trichloroethane	U	5.00	75800	500	U	5.00	U	5.00	5250	500
Carbon Tetrachloride	U	5.00	U	500	U	5.00	U	5.00	U	500
Benzene	U	5.00	U	500	U	5.00	U	5.00	U	500
Trichloroethene	U	5.00	191 J	500	U	5.00	U	5.00	3340	500
1,2-Dichloropropane	U	5.00	U	500	U	5.00	U	5.00	U	500
Bromodichloromethane	U	5.00	U	500	U	5.00	U	5.00	U	500
Dibromomethane	U	5.00	U	500	U	5.00	U	5.00	U	500
cis-1,3-Dichloropropene	U	5.00	U	500	U	5.00	U	5.00	U	500
trans-1,3-Dichloropropene	U	5.00	U	500	U	5.00	U	5.00	U	500
1,1,2-Trichloroethane	U	5.00	U	500	U	5.00	U	5.00	U	500
1,3-Dichloropropane	U	5.00	U	500	U	5.00	U	5.00	U	500
Dibromochloromethane	U	5.00	U	500	U	5.00	U	5.00	U	500
1,2-Dibromoethane	U	5.00	U	500	U	5.00	U	5.00	U	500
Bromoform	U	5.00	U	500	U	5.00	U	5.00	U	500
4-Methyl-2-pentanone	U	5.00	U	500	U	5.00	U	5.00	U	500
Toluene	U	5.00	U	500	U	5.00	U	5.00	U	500
2-Hexanone	U	5.00	U	500	U	5.00	U	5.00	U	500
Tetrachloroethene	U	5.00	U	500	U	5.00	U	5.00	U	500
Chlorobenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
1,1,1,2-Tetrachloroethane	U	5.00	U	500	U	5.00	U	5.00	U	500
Ethylbenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
p&m-Xylene	U	10.0	U	1000	U	10.0	U	10.0	U	1000
o-Xylene	U	5.00	U	500	U	5.00	U	5.00	U	500
Styrene	U	5.00	U	500	U	5.00	U	5.00	U	500
Isopropylbenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
1,1,2,2-Tetrachloroethane	U	5.00	U	500	U	5.00	U	5.00	U	500
1,2,3-Trichloropropane	U	5.00	U	500	U	5.00	U	5.00	U	500
n-Propylbenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
Bromobenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
1,3,5-Trimethylbenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
2-Chlorotoluene	U	5.00	U	500	U	5.00	U	5.00	U	500
4-Chlorotoluene	U	5.00	U	500	U	5.00	U	5.00	U	500
tert-Butylbenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
1,2,4-Trimethylbenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
sec-Butylbenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
p-Isopropyltoluene	U	5.00	U	500	U	5.00	U	5.00	U	500
1,3-Dichlorobenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
1,4-Dichlorobenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
n-Butylbenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
1,2-Dichlorobenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
1,2-Dibromo-3-chloropropane	U	5.00	U	500	U	5.00	U	5.00	U	500
1,2,4-Trichlorobenzene	U	5.00	U	500	U	5.00	U	5.00	U	500
Hexachlorobutadiene	U	5.00	U	500	U	5.00	U	5.00	U	500
Naphthalene	U	5.00	U	500	U	5.00	U	5.00	U	500
1,2,3-Trichlorobenzene	U	5.00	U	500	U	5.00	U	5.00	U	500

n2311

Table 1.1(cont.) Results of the Analysis for VOC in Water  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

Method: REAC SOP 1806

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Sample No. Water Blank B 091106-1

15174

15175

Location:

MW-B

MW-F

Dilution Factor

1

1

1

Analyte	Result µg/L	RL µg/L	Result µg/L	RL µg/L	Result µg/L	RL µg/L
Dichlorodifluoromethane	U	5.00	U	5.00	U	5.00
Chloromethane	U	5.00	U	5.00	U	5.00
Vinyl Chloride	U	5.00	U	5.00	U	5.00
Bromomethane	U	5.00	U	5.00	U	5.00
Chloroethane	U	5.00	U	5.00	U	5.00
Trichlorofluoromethane	U	5.00	U	5.00	U	5.00
Acetone	U	20.0	U	20.0	U	20.0
1,1-Dichloroethene	U	5.00	U	5.00	U	5.00
Methylene Chloride	U	5.00	U	5.00	U	5.00
Carbon Disulfide	U	5.00	U	5.00	U	5.00
Methyl-t-butyl Ether	U	5.00	U	5.00	U	5.00
trans-1,2-Dichloroethene	U	5.00	U	5.00	U	5.00
1,1-Dichloroethane	U	5.00	U	5.00	U	5.00
2-Butanone	U	5.00	U	5.00	U	5.00
2,2-Dichloropropane	U	5.00	U	5.00	U	5.00
cis-1,2-Dichloroethene	U	5.00	U	5.00	U	5.00
Chloroform	U	5.00	U	5.00	U	5.00
1,1-Dichloropropene	U	5.00	U	5.00	U	5.00
1,2-Dichloroethane	U	5.00	U	5.00	U	5.00
1,1,1-Trichloroethane	U	5.00	U	5.00	12.1	5.00
Carbon Tetrachloride	U	5.00	U	5.00	U	5.00
Benzene	U	5.00	U	5.00	U	5.00
Trichloroethene	U	5.00	U	5.00	13.5	5.00
1,2-Dichloropropane	U	5.00	U	5.00	U	5.00
Bromodichloromethane	U	5.00	U	5.00	U	5.00
Dibromomethane	U	5.00	U	5.00	U	5.00
cis-1,3-Dichloropropene	U	5.00	U	5.00	U	5.00
trans-1,3-Dichloropropene	U	5.00	U	5.00	U	5.00
1,1,2-Trichloroethane	U	5.00	U	5.00	U	5.00
1,3-Dichloropropane	U	5.00	U	5.00	U	5.00
Dibromochloromethane	U	5.00	U	5.00	U	5.00
1,2-Dibromoethane	U	5.00	U	5.00	U	5.00
Bromoform	U	5.00	U	5.00	U	5.00
4-Methyl-2-pentanone	U	5.00	U	5.00	U	5.00
Toluene	U	5.00	U	5.00	U	5.00
2-Hexanone	U	5.00	U	5.00	U	5.00
Tetrachloroethene	U	5.00	U	5.00	U	5.00
Chlorobenzene	U	5.00	U	5.00	U	5.00
1,1,1,2-Tetrachloroethane	U	5.00	U	5.00	U	5.00
Ethylbenzene	U	5.00	U	5.00	U	5.00
p&m-Xylene	U	10.0	U	10.0	U	10.0
o-Xylene	U	5.00	U	5.00	U	5.00
Styrene	U	5.00	U	5.00	U	5.00
Isopropylbenzene	U	5.00	U	5.00	U	5.00
1,1,2,2-Tetrachloroethane	U	5.00	U	5.00	U	5.00
1,2,3-Trichloropropane	U	5.00	U	5.00	U	5.00
n-Propylbenzene	U	5.00	U	5.00	U	5.00
Bromobenzene	U	5.00	U	5.00	U	5.00
1,3,5-Trimethylbenzene	U	5.00	U	5.00	U	5.00
2-Chlorotoluene	U	5.00	U	5.00	U	5.00
4-Chlorotoluene	U	5.00	U	5.00	U	5.00
tert-Butylbenzene	U	5.00	U	5.00	U	5.00
1,2,4-Trimethylbenzene	U	5.00	U	5.00	U	5.00
sec-Butylbenzene	U	5.00	U	5.00	U	5.00
p-Isopropyltoluene	U	5.00	U	5.00	U	5.00
1,3-Dichlorobenzene	U	5.00	U	5.00	U	5.00
1,4-Dichlorobenzene	U	5.00	U	5.00	U	5.00
n-Butylbenzene	U	5.00	U	5.00	U	5.00
1,2-Dichlorobenzene	U	5.00	U	5.00	U	5.00
1,2-Dibromo-3-chloropropane	U	5.00	U	5.00	U	5.00
1,2,4-Trichlorobenzene	U	5.00	U	5.00	U	5.00
Hexachlorobutadiene	U	5.00	U	5.00	U	5.00
Naphthalene	U	5.00	U	5.00	U	5.00
1,2,3-Trichlorobenzene	U	5.00	U	5.00	U	5.00

rv2312

Table 1.1(cont.) Results of the Analysis for VOC in Water  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

Method: REAC SOP 1806

Page 3 of 5

Sample No. Water Blank B 091206-2 15189  
Location: MW-43/44  
Dilution Factor 1 2

Analyte	Result µg/L	RL µg/L	Result µg/L	RL µg/L
Dichlorodifluoromethane	U	5.00	U	10.0
Chloromethane	U	5.00	U	10.0
Vinyl Chloride	U	5.00	U	10.0
Bromomethane	U	5.00	U	10.0
Chloroethane	U	5.00	U	10.0
Trichlorofluoromethane	U	5.00	U	10.0
Acetone	U	20.0	U	40.0
1,1-Dichloroethene	U	5.00	U	10.0
Methylene Chloride	U	5.00	U	10.0
Carbon Disulfide	U	5.00	U	10.0
Methyl-t-butyl Ether	U	5.00	U	10.0
trans-1,2-Dichloroethene	U	5.00	U	10.0
1,1-Dichloroethane	U	5.00	14.2	10.0
2-Butanone	U	5.00	U	10.0
2,2-Dichloropropane	U	5.00	U	10.0
cis-1,2-Dichloroethene	U	5.00	U	10.0
Chloroform	U	5.00	U	10.0
1,1-Dichloropropene	U	5.00	U	10.0
1,2-Dichloroethane	U	5.00	U	10.0
1,1,1-Trichloroethane	U	5.00	246	10.0
Carbon Tetrachloride	U	5.00	U	10.0
Benzene	U	5.00	U	10.0
Trichloroethene	U	5.00	2.54	10.0
1,2-Dichloropropane	U	5.00	U	10.0
Bromodichloromethane	U	5.00	U	10.0
Dibromomethane	U	5.00	U	10.0
cis-1,3-Dichloropropene	U	5.00	U	10.0
trans-1,3-Dichloropropene	U	5.00	U	10.0
1,1,2-Trichloroethane	U	5.00	U	10.0
1,3-Dichloropropane	U	5.00	U	10.0
Dibromochloromethane	U	5.00	U	10.0
1,2-Dibromoethane	U	5.00	U	10.0
Bromoform	U	5.00	U	10.0
4-Methyl-2-pentanone	U	5.00	U	10.0
Toluene	U	5.00	U	10.0
2-Hexanone	U	5.00	U	10.0
Tetrachloroethene	U	5.00	U	10.0
Chlorobenzene	U	5.00	U	10.0
1,1,1,2-Tetrachloroethane	U	5.00	U	10.0
Ethylbenzene	U	5.00	U	10.0
p&m-Xylene	U	10.0	U	20.0
o-Xylene	U	5.00	U	10.0
Styrene	U	5.00	U	10.0
Isopropylbenzene	U	5.00	U	10.0
1,1,2,2-Tetrachloroethane	U	5.00	U	10.0
1,2,3-Trichloropropane	U	5.00	U	10.0
n-Propylbenzene	U	5.00	U	10.0
Bromobenzene	U	5.00	U	10.0
1,3,5-Trimethylbenzene	U	5.00	U	10.0
2-Chlorotoluene	U	5.00	U	10.0
4-Chlorotoluene	U	5.00	U	10.0
tert-Butylbenzene	U	5.00	U	10.0
1,2,4-Trimethylbenzene	U	5.00	U	10.0
sec-Butylbenzene	U	5.00	U	10.0
p-Isopropyltoluene	U	5.00	U	10.0
1,3-Dichlorobenzene	U	5.00	U	10.0
1,4-Dichlorobenzene	U	5.00	U	10.0
n-Butylbenzene	U	5.00	U	10.0
1,2-Dichlorobenzene	U	5.00	U	10.0
1,2-Dibromo-3-chloropropane	U	5.00	U	10.0
1,2,4-Trichlorobenzene	U	5.00	U	10.0
Hexachlorobutadiene	U	5.00	U	10.0
Naphthalene	U	5.00	U	10.0
1,2,3-Trichlorobenzene	U	5.00	U	10.0

rv2313





Table 1.1(cont.) Results of the Analysis for VOC in Water  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

Method: REAC SOP 1807

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Sample Number	Water Blank 083106-1		23889		00632	
Sample Location:			GW-001		Old MW	
Dilution Factor	1		100		10	
Analyte	Result µg/L	RL µg/L	Result µg/L	RL µg/L	Result µg/L	RL µg/L
Dichlorodifluoromethane	U	5.00	U	500	U	50.0
Chloromethane	U	5.00	U	500	U	50.0
Vinyl Chloride	U	5.00	U	500	U	50.0
Bromomethane	U	5.00	U	500	U	50.0
Chloroethane	U	5.00	U	500	U	50.0
Trichlorofluoromethane	U	5.00	401	J 500	U	50.0
Acetone	U	5.00	U	2000	43.1	J 50.0
1,1-Dichloroethene	U	5.00	6860	500	33.0	J 50.0
Methylene Chloride	U	5.00	155	J 500	U	50.0
Carbon Disulfide	U	5.00	U	500	U	50.0
Methyl-t-butyl Ether	U	5.00	U	500	U	50.0
trans-1,2-Dichloroethene	U	5.00	U	500	U	50.0
1,1-Dichloroethane	U	5.00	592	500	69.4	50.0
2-Butanone	U	5.00	U	500	U	50.0
2,2-Dichloropropane	U	5.00	U	500	U	50.0
cis-1,2-Dichloroethene	U	5.00	3310	500	2.15	J 50.0
Chloroform	U	5.00	U	500	U	50.0
1,1-Dichloropropene	U	5.00	U	500	U	50.0
1,2-Dichloroethane	U	5.00	U	500	U	50.0
1,1,1-Trichloroethane	U	5.00	9700	500	426	50.0
Carbon Tetrachloride	U	5.00	U	500	U	50.0
Benzene	U	5.00	U	500	U	50.0
Trichloroethene	U	5.00	17200	500	417	J 50.0
1,2-Dichloropropane	U	5.00	U	500	U	50.0
Bromodichloromethane	U	5.00	U	500	U	50.0
Dibromomethane	U	5.00	U	500	U	50.0
cis-1,3-Dichloropropene	U	5.00	U	500	U	50.0
trans-1,3-Dichloropropene	U	5.00	U	500	U	50.0
1,1,2-Trichloroethane	U	5.00	U	500	U	50.0
1,3-Dichloropropene	U	5.00	U	500	U	50.0
Dibromochloromethane	U	5.00	U	500	U	50.0
1,2-Dibromoethane	U	5.00	U	500	U	50.0
Bromofom	U	5.00	U	500	U	50.0
4-Methyl-2-pentanone	U	5.00	U	500	U	50.0
Toluene	U	5.00	725	500	U	50.0
2-Hexanone	U	5.00	U	500	U	50.0
Tetrachloroethene	U	5.00	U	500	U	50.0
Chlorobenzene	U	5.00	U	500	U	50.0
1,1,1,2-Tetrachloroethane	U	5.00	U	500	U	50.0
Ethylbenzene	U	5.00	U	500	U	50.0
p&m-Xylene	U	5.00	U	1000	U	50.0
o-Xylene	U	5.00	U	500	U	50.0
Styrene	U	5.00	U	500	U	50.0
Isopropylbenzene	U	5.00	U	500	U	50.0
1,1,2,2-Tetrachloroethane	U	5.00	U	500	U	50.0
1,2,3-Trichloropropane	U	5.00	U	500	U	50.0
n-Propylbenzene	U	5.00	U	500	U	50.0
Bromobenzene	U	5.00	U	500	U	50.0
1,3,5-Trimethylbenzene	U	5.00	U	500	U	50.0
2-Chlorotoluene	U	5.00	U	500	U	50.0
4-Chlorotoluene	U	5.00	U	500	U	50.0
tert-Butylbenzene	U	5.00	U	500	U	50.0
1,2,4-Trimethylbenzene	U	5.00	U	500	U	50.0
sec-Butylbenzene	U	5.00	U	500	U	50.0
p-Isopropyltoluene	U	5.00	U	500	U	50.0
1,3-Dichlorobenzene	U	5.00	U	500	U	50.0
1,4-Dichlorobenzene	U	5.00	U	500	U	50.0
n-Butylbenzene	U	5.00	U	500	U	50.0
1,2-Dichlorobenzene	U	5.00	U	500	U	50.0
1,2-Dibromo-3-chloropropane	U	5.00	U	500	U	50.0
1,2,4-Trichlorobenzene	U	5.00	U	500	U	50.0
Hexachlorobutadiene	1.25	J 5.00	U	500	U	50.0
Naphthalene	U	5.00	U	500	U	50.0
1,2,3-Trichlorobenzene	U	5.00	U	500	U	50.0

rv\_2352

Table 1.2 Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

Method: REAC SOP 1807

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Sample No:	MeOH Blank B 091106-I		A 0-109		A 10190	
Location:			SB-036 18.5'		SB-036 19.5'	
Dilution Factor	50		140		100	
Percent Solids	100		65		67	
	Result	RL	Result	RL	Result	RL
Analyte	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Dichlorodifluoromethane	U	250	U	588	U	575
Chloromethane	U	250	U	588	U	575
Vinyl Chloride	U	250	U	588	U	575
Bromomethane	U	250	U	588	U	575
Chloroethane	U	250	U	588	U	575
Trichlorofluoromethane	U	250	U	588	U	575
Acetone	U	1000	U	2350	U	2300
1,1-Dichloroethene	U	250	U	588	410 J	575
Methylene Chloride	U	250	U	588	U	575
Carbon Disulfide	U	250	U	588	U	575
Methyl-t-butyl Ether	U	250	U	588	U	575
trans-1,2-Dichloroethene	U	250	U	588	U	575
1,1-Dichloroethane	U	250	U	588	U	575
2-Butanone	U	250	U	588	U	575
2,2-Dichloropropane	U	250	U	588	U	575
cis-1,2-Dichloroethane	U	250	U	588	U	575
Chloroform	U	250	U	588	U	575
1,1-Dichloropropene	U	250	U	588	U	575
1,2-Dichloroethane	U	250	U	588	U	575
1,1,1-Trichloroethane	U	250	1940	588	10700	575
Carbon Tetrachloride	U	250	U	588	U	575
Benzene	U	250	U	588	U	575
Trichloroethene	U	250	538 J	588	271 J	575
1,2-Dichloropropane	U	250	U	588	U	575
Bromodichloromethane	U	250	U	588	U	575
Dibromomethane	U	250	U	588	U	575
cis-1,3-Dichloropropene	U	250	U	588	U	575
trans-1,3-Dichloropropene	U	250	U	588	U	575
1,1,2-Trichloroethane	U	250	U	588	U	575
1,3-Dichloropropane	U	250	U	588	U	575
Dibromochloromethane	U	250	U	588	U	575
1,2-Dibromoethane	U	250	U	588	U	575
Bromofom	U	250	U	588	U	575
4-Methyl-2-pentanone	U	250	U	588	U	575
Toluene	U	250	U	588	U	575
2-Hexanone	U	250	U	588	U	575
Tetrachloroethene	U	250	U	588	U	575
Chlorobenzene	U	250	U	588	U	575
1,1,1,2-Tetrachloroethane	U	250	U	588	U	575
Ethylbenzene	U	250	U	588	U	575
m-Xylene	U	500	U	1180	U	1150
o-Xylene	U	250	U	588	U	575
Styrene	U	250	U	588	U	575
Isopropylbenzene	U	250	U	588	U	575
1,1,2,2-Tetrachloroethane	U	250	J	588	U	575
1,2,3-Trichloropropane	U	250	J	588	U	575
n-Propylbenzene	U	250	J	588	U	575
Bromobenzene	U	250	U	588	U	575
1,3,5-Trimethylbenzene	U	250	U	588	U	575
2-Chlorotoluene	U	250	U	588	U	575
4-Chlorotoluene	U	250	U	588	U	575
tert-Butylbenzene	U	250	U	588	U	575
1,2,4-Trimethylbenzene	U	250	U	588	U	575
sec-Butylbenzene	U	250	U	588	U	575
p-Isopropyltoluene	U	250	U	588	U	575
1,3-Dichlorobenzene	U	250	U	588	U	575
1,4-Dichlorobenzene	U	250	U	588	U	575
n-Butylbenzene	U	250	U	588	U	575
1,2-Dichlorobenzene	U	250	U	588	U	575
1,2-Dibromo-3-chloropropane	U	250	U	588	U	575
1,2,4-Trichlorobenzene	U	250	U	588	U	575
Hexachlorobutadiene	U	250	U	588	U	575
Naphthalene	U	250	U	588	U	575
1,2,3-Trichlorobenzene	U	250	U	588	U	575

rv2362

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No:	MeOH Blank B 091206-1		A 04111 SB-035 19-20'		A 04113 SB-037 20'		A 04114 SB-038 15'		A 04116 SB-038 18'	
Location:	50		100		500		500		2000	
Dilution Factor	100		84		83		82		81	
Percent Solids										
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	250	U	595	U	3010	U	3050	U	12300
Chloromethane	U	250	U	595	U	3010	U	3050	U	12300
Vinyl Chloride	U	250	U	595	U	3010	U	3050	U	12300
Bromomethane	U	250	U	595	U	3010	U	3050	U	12300
Chloroethane	U	250	U	595	U	3010	U	3050	U	12300
Trichlorofluoromethane	U	1000	U	2380	U	12000	U	12200	U	49400
Acetone	U	250	U	595	U	3010	4150	3050	U	12300
1,1-Dichloroethene	U	250	U	595	U	3010	U	3050	U	12300
Methylene Chloride	U	250	U	595	U	3010	U	3050	U	12300
Carbon Disulfide	U	250	U	595	U	3010	U	3050	U	12300
Methyl-t-butyl Ether	U	250	U	595	U	3010	U	3050	U	12300
trans-1,2-Dichloroethene	U	250	U	595	U	3010	U	3050	U	12300
1,1-Dichloroethane	U	250	U	595	U	3010	U	3050	U	12300
2-Butanone	U	250	U	595	U	3010	U	3050	U	12300
2,2-Dichloropropane	U	250	U	595	U	3010	U	3050	U	12300
cis-1,2-Dichloroethene	U	250	U	595	U	3010	U	3050	U	12300
Chloroform	U	250	U	595	U	3010	U	3050	U	12300
1,1-Dichloropropene	U	250	U	595	U	3010	U	3050	U	12300
1,2-Dichloroethane	U	250	9190	595	58000	3010	158000	6100	278000	12300
1,1,1-Trichloroethane	U	250	U	595	U	3010	U	3050	U	12300
Carbon Tetrachloride	U	250	U	595	U	3010	U	3050	U	12300
Benzene	U	250	561	595	U	3010	854	3050	U	12300
Trichloroethene	U	250	U	595	U	3010	U	3050	U	12300
1,2-Dichloropropane	U	250	U	595	U	3010	U	3050	U	12300
Bromodichloromethane	U	250	U	595	U	3010	U	3050	U	12300
Dibromomethane	U	250	U	595	U	3010	U	3050	U	12300
cis-1,3-Dichloropropene	U	250	U	595	U	3010	U	3050	U	12300
trans-1,3-Dichloropropene	U	250	U	595	U	3010	U	3050	U	12300
1,1,2-Trichloroethane	U	250	U	595	U	3010	U	3050	U	12300
1,3-Dichloropropane	U	250	U	595	U	3010	U	3050	U	12300
Dibromochloromethane	U	250	U	595	U	3010	U	3050	U	12300
1,2-Dibromoethane	U	250	U	595	U	3010	U	3050	U	12300
Bromoform	U	250	U	595	U	3010	U	3050	U	12300
4-Methyl-2-pentanone	U	250	U	595	U	3010	U	3050	U	12300
Toluene	U	250	U	595	U	3010	U	3050	U	12300
2-Hexanone	U	250	U	595	U	3010	U	3050	U	12300
Tetrachloroethene	U	250	U	595	U	3010	U	3050	U	12300
Chlorobenzene	U	250	U	595	U	3010	U	3050	U	12300
1,1,1,2-Tetrachloroethane	U	250	U	595	U	3010	U	6100	U	24700
Ethylbenzene	U	500	U	1190	U	6020	U	3050	U	12300
p&m-Xylene	U	250	U	595	U	3010	U	3050	U	12300
o-Xylene	U	250	U	595	U	3010	U	3050	U	12300
Styrene	U	250	U	595	U	3010	U	3050	U	12300
Isopropylbenzene	U	250	U	595	U	3010	U	3050	U	12300
1,1,2,2-Tetrachloroethane	U	250	U	595	U	3010	U	3050	U	12300
1,2,3-Trichloropropane	U	250	U	595	U	3010	U	3050	U	12300
n-Propylbenzene	U	250	U	595	U	3010	U	3050	U	12300
Bromobenzene	U	250	U	595	U	3010	U	3050	U	12300
1,3,5-Trimethylbenzene	U	250	U	595	U	3010	U	3050	U	12300
2-Chlorotoluene	U	250	U	595	U	3010	U	3050	U	12300
4-Chlorotoluene	U	250	U	595	U	3010	U	3050	U	12300
tert-Butylbenzene	U	250	U	595	U	3010	U	3050	U	12300
1,2,4-Trimethylbenzene	U	250	U	595	U	3010	U	3050	U	12300
sec-Butylbenzene	U	250	U	595	U	3010	U	3050	U	12300
p-Isopropyltoluene	U	250	U	595	U	3010	U	3050	U	12300
1,3-Dichlorobenzene	U	250	U	595	U	3010	U	3050	U	12300
1,4-Dichlorobenzene	U	250	U	595	U	3010	U	3050	U	12300
n-Butylbenzene	U	250	U	595	U	3010	U	3050	U	12300
1,2-Dichlorobenzene	U	250	U	595	U	3010	U	3050	U	12300
1,2-Dibromo-3-chloropropane	U	250	U	595	U	3010	U	3050	U	12300
1,2,4-Trichlorobenzene	U	250	U	595	U	3010	U	3050	U	12300
Hexachlorobutadiene	U	250	U	595	U	3010	U	3050	U	12300
Naphthalene	U	250	U	595	U	3010	U	3050	U	12300
1,2,3-Trichlorobenzene	U	250	U	595	U	3010	U	3050	U	12300

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No:	MeOH Blank B 091206-1		A 10193 SB-0311 20'		A 04115 SB-039 17-18'	
Location:	50		501		5000	
Dilution Factor	100		83		82	
Percent Solids						
Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	250	U	3010	U	30500
Chloromethane	U	250	U	3010	U	30500
Vinyl Chloride	U	250	U	3010	U	30500
Bromomethane	U	250	U	3010	U	30500
Chloroethane	U	250	U	3010	U	30500
Trichlorofluoromethane	U	1000	U	12000	U	122000
Acetone	U	250	2400 J	3010	12700 J	30500
1,1-Dichloroethene	U	250	U	3010	U	30500
Methylene Chloride	U	250	U	3010	U	30500
Carbon Disulfide	U	250	U	3010	U	30500
Methyl-t-butyl Ether	U	250	U	3010	U	30500
trans-1,2-Dichloroethene	U	250	U	3010	U	30500
1,1-Dichloroethane	U	250	U	3010	U	30500
2-Butanone	U	250	U	3010	U	30500
2,2-Dichloropropane	U	250	U	3010	U	30500
cis-1,2-Dichloroethene	U	250	U	3010	U	30500
Chloroform	U	250	U	3010	U	30500
1,1-Dichloropropene	U	250	U	3010	U	30500
1,2-Dichloroethane	U	250	31800	3010	884000	30500
1,1,1-Trichloroethane	U	250	U	3010	U	30500
Carbon Tetrachloride	U	250	U	3010	U	30500
Benzene	U	250	U	3010	U	30500
Trichloroethene	U	250	U	3010	U	30500
1,2-Dichloropropane	U	250	U	3010	U	30500
Bromodichloromethane	U	250	U	3010	U	30500
Dibromomethane	U	250	U	3010	U	30500
cis-1,3-Dichloropropene	U	250	U	3010	U	30500
trans-1,3-Dichloropropene	U	250	U	3010	U	30500
1,1,2-Trichloroethane	U	250	U	3010	U	30500
1,3-Dichloropropane	U	250	U	3010	U	30500
Dibromochloromethane	U	250	U	3010	U	30500
1,2-Dibromoethane	U	250	U	3010	U	30500
Bromoform	U	250	U	3010	U	30500
4-Methyl-2-pentanone	U	250	U	3010	U	30500
Toluene	U	250	U	3010	U	30500
2-Hexanone	U	250	U	3010	U	30500
Tetrachloroethene	U	250	U	3010	U	30500
Chlorobenzene	U	250	U	3010	U	30500
1,1,1,2-Tetrachloroethane	U	250	U	3010	U	30500
Ethylbenzene	U	500	U	6020	U	61000
p&m-Xylene	U	250	U	3010	U	30500
o-Xylene	U	250	U	3010	U	30500
Styrene	U	250	U	3010	U	30500
Isopropylbenzene	U	250	U	3010	U	30500
1,1,2,2-Tetrachloroethane	U	250	U	3010	U	30500
1,2,3-Trichloropropane	U	250	U	3010	U	30500
n-Propylbenzene	U	250	U	3010	U	30500
Bromobenzene	U	250	U	3010	U	30500
1,3,5-Trimethylbenzene	U	250	U	3010	U	30500
2-Chlorotoluene	U	250	U	3010	U	30500
4-Chlorotoluene	U	250	U	3010	U	30500
tert-Butylbenzene	U	250	U	3010	U	30500
1,2,4-Trimethylbenzene	U	250	U	3010	U	30500
sec-Butylbenzene	U	250	U	3010	U	30500
p-Isopropyltoluene	U	250	U	3010	U	30500
1,3-Dichlorobenzene	U	250	U	3010	U	30500
1,4-Dichlorobenzene	U	250	U	3010	U	30500
n-Butylbenzene	U	250	U	3010	U	30500
1,2-Dichlorobenzene	U	250	U	3010	U	30500
1,2-Dibromo-3-chloropropane	U	250	U	3010	U	30500
1,2,4-Trichlorobenzene	U	250	U	3010	U	30500
Hexachlorobutadiene	U	250	U	3010	U	30500
Naphthalene	U	250	U	3010	U	30500
1,2,3-Trichlorobenzene	U	250	U	3010	U	30500

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No:	MeOH Blank B 091206-4		A 10191 SB-039 19.5'		A 10192 SB-039 20'		A 22409 SB-040 18'		A 22428 SB-040 20'	
Location:										
Dilution Factor	50		500		1000		2500		100	
Percent Solids	100		83		84		81		85	
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	250	U	3010	U	5950	U	15400	U	588
Chloromethane	U	250	U	3010	U	5950	U	15400	U	588
Vinyl Chloride	U	250	U	3010	U	5950	U	15400	U	588
Bromomethane	U	250	U	3010	U	5950	U	15400	U	588
Chloroethane	U	250	U	3010	U	5950	U	15400	U	588
Trichlorofluoromethane	U	1000	U	12000	U	23800	U	61700	U	2350
Acetone	U	250	U	3010	U	5950	U	15400	319	588
1,1-Dichloroethene	U	250	U	3010	U	5950	U	15400	U	588
Methylene Chloride	U	250	U	3010	U	5950	U	15400	U	588
Carbon Disulfide	U	250	U	3010	U	5950	U	15400	U	588
Methyl-t-butyl Ether	U	250	U	3010	U	5950	U	15400	U	588
trans-1,2-Dichloroethene	U	250	U	3010	U	5950	U	15400	U	588
1,1-Dichloroethane	U	250	U	3010	U	5950	U	15400	U	588
2-Butanone	U	250	U	3010	U	5950	U	15400	U	588
2,2-Dichloropropane	U	250	U	3010	U	5950	U	15400	U	588
cis-1,2-Dichloroethene	U	250	U	3010	U	5950	U	15400	U	588
Chloroform	U	250	U	3010	U	5950	U	15400	U	588
1,1-Dichloropropene	U	250	U	3010	U	5950	328000	15400	16700	588
1,2-Dichloroethane	U	250	86500	3010	18300	5950	U	15400	U	588
1,1,1-Trichloroethane	U	250	U	3010	U	5950	U	15400	U	588
Carbon Tetrachloride	U	250	U	3010	U	5950	U	15400	233	588
Benzene	U	250	U	3010	U	5950	U	15400	U	588
Trichloroethene	U	250	U	3010	U	5950	U	15400	U	588
1,2-Dichloropropane	U	250	U	3010	U	5950	U	15400	U	588
Bromodichloromethane	U	250	U	3010	U	5950	U	15400	U	588
Dibromomethane	U	250	U	3010	U	5950	U	15400	U	588
cis-1,3-Dichloropropene	U	250	U	3010	U	5950	U	15400	U	588
trans-1,3-Dichloropropene	U	250	U	3010	U	5950	U	15400	U	588
1,1,2-Trichloroethane	U	250	U	3010	U	5950	U	15400	U	588
1,3-Dichloropropene	U	250	U	3010	U	5950	U	15400	U	588
Dibromochloromethane	U	250	U	3010	U	5950	U	15400	U	588
1,2-Dibromoethane	U	250	U	3010	U	5950	U	15400	U	588
Bromoform	U	250	U	3010	U	5950	U	15400	U	588
4-Methyl-2-pentanone	U	250	U	3010	U	5950	U	15400	U	588
Toluene	U	250	U	3010	U	5950	U	15400	U	588
2-Hexanone	U	250	U	3010	U	5950	U	15400	U	588
Tetrachloroethene	U	250	U	3010	U	5950	U	15400	U	588
Chlorobenzene	U	250	U	3010	U	5950	U	15400	U	588
1,1,1,2-Tetrachloroethane	U	250	U	3010	U	5950	U	30900	U	1180
Ethylbenzene	U	500	U	6020	U	11900	U	15400	U	588
p&m-Xylene	U	250	U	3010	U	5950	U	15400	U	588
o-Xylene	U	250	U	3010	U	5950	U	15400	U	588
Styrene	U	250	U	3010	U	5950	U	15400	U	588
Isopropylbenzene	U	250	U	3010	U	5950	U	15400	U	588
1,1,2,2-Tetrachloroethane	U	250	U	3010	U	5950	U	15400	U	588
1,2,3-Trichloropropane	U	250	U	3010	U	5950	U	15400	U	588
n-Propylbenzene	U	250	U	3010	U	5950	U	15400	U	588
Bromobenzene	U	250	U	3010	U	5950	U	15400	U	588
1,3,5-Trimethylbenzene	U	250	U	3010	U	5950	U	15400	U	588
2-Chlorotoluene	U	250	U	3010	U	5950	U	15400	U	588
4-Chlorotoluene	U	250	U	3010	U	5950	U	15400	U	588
tert-Butylbenzene	U	250	U	3010	U	5950	U	15400	U	588
1,2,4-Trimethylbenzene	U	250	U	3010	U	5950	U	15400	U	588
sec-Butylbenzene	U	250	U	3010	U	5950	U	15400	U	588
p-Isopropyltoluene	U	250	U	3010	U	5950	U	15400	U	588
1,3-Dichlorobenzene	U	250	U	3010	U	5950	U	15400	U	588
1,4-Dichlorobenzene	U	250	U	3010	U	5950	U	15400	U	588
n-Butylbenzene	U	250	U	3010	U	5950	U	15400	U	588
1,2-Dichlorobenzene	U	250	U	3010	U	5950	U	15400	U	588
1,2-Dibromo-3-chloropropane	U	250	U	3010	U	5950	U	15400	U	588
1,2,4-Trichlorobenzene	U	250	U	3010	U	5950	U	15400	U	588
Hexachlorobutadiene	U	250	U	3010	U	5950	U	15400	U	588
Naphthalene	U	250	U	3010	U	5950	U	15400	U	588
1,2,3-Trichlorobenzene	U	250	U	3010	U	5950	U	15400	U	588

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vernal Chlorinator Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Method: REAC SOP 1807		MeOH Blank B 091206-4		A 23899		A 15159		A 15158		A 23898	
Sample No:				SB-041 16.5'		SB-041 19'		SB-042 19.5'		SB-044 15.5'	
Location:		50		2000		500		200		100	
Dilution Factor		100		82		87		82		83	
Percent Solids											
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	Result µg/Kg
Dichlorodifluoromethane	U	250	U	122000	U	2870	U	1220	U		602
Chloromethane	U	250	U	122000	U	2870	U	1220	U		602
Vinyl Chloride	U	250	U	122000	U	2870	U	1220	U		602
Bromomethane	U	250	U	122000	U	2870	U	1220	U		602
Chloroethane	U	250	U	122000	U	2870	U	1220	U		602
Trichlorofluoromethane	U	250	U	122000	U	2870	U	1220	U		2410
Acetone	U	1000	U	488000	U	11500	U	4880	U		602
1,1-Dichloroethene	U	250	U	122000	U	2870	1180	1220	519	J	602
Methylene Chloride	U	250	U	122000	U	2870	U	1220	U		602
Carbon Disulfide	U	250	U	122000	U	2870	U	1220	U		602
Methyl-t-butyl Ether	U	250	U	122000	U	2870	U	1220	U		602
trans-1,2-Dichloroethene	U	250	U	122000	U	2870	U	1220	U		602
1,1-Dichloroethane	U	250	U	122000	U	2870	U	1220	U		602
2-Butanone	U	250	U	122000	U	2870	U	1220	U		602
2,2-Dichloropropane	U	250	U	122000	U	2870	U	1220	U		602
cis-1,2-Dichloroethene	U	250	U	122000	U	2870	U	1220	U		602
Chloroform	U	250	U	122000	U	2870	U	1220	U		602
1,1-Dichloropropene	U	250	U	122000	U	2870	U	1220	U		602
1,2-Dichloroethane	U	250	2650000	22000	36500	2870	58200	3050	37600		3010
1,1,1-Trichloroethane	U	250	U	122000	U	2870	U	1220	U		602
Carbon Tetrachloride	U	250	U	122000	U	2870	U	1220	U		602
Benzene	U	250	U	122000	U	2870	2110	1220	487	J	602
Trichloroethene	U	250	U	122000	U	2870	U	1220	U		602
1,2-Dichloropropane	U	250	U	122000	U	2870	U	1220	U		602
Bromodichloromethane	U	250	U	122000	U	2870	U	1220	U		602
Dibromomethane	U	250	U	122000	U	2870	U	1220	U		602
cis-1,3-Dichloropropene	U	250	U	122000	U	2870	U	1220	U		602
trans-1,3-Dichloropropene	U	250	U	122000	U	2870	U	1220	U		602
1,1,2-Trichloroethane	U	250	U	122000	U	2870	U	1220	U		602
1,3-Dichloropropane	U	250	J	122000	U	2870	U	1220	U		602
Dibromochloromethane	U	250	J	122000	U	2870	U	1220	U		602
1,2-Dibromoethane	U	250	J	122000	U	2870	U	1220	U		602
Bromoform	U	250	U	122000	U	2870	U	1220	U		602
4-Methyl-2-pentanone	U	250	U	122000	U	2870	U	1220	U		602
Toluene	U	250	U	122000	U	2870	U	1220	U		602
2-Hexanone	U	250	U	122000	U	2870	U	1220	U		602
Tetrachloroethene	U	250	U	122000	U	2870	U	1220	U		602
Chlorobenzene	U	250	U	122000	U	2870	U	1220	U		602
1,1,1,2-Tetrachloroethane	U	250	U	122000	U	2870	U	1220	U		1200
Ethylbenzene	U	500	U	244000	U	5750	U	2440	U		602
p&m-Xylene	U	250	U	122000	U	2870	U	1220	U		602
o-Xylene	U	250	U	122000	U	2870	U	1220	U		602
Styrene	U	250	U	122000	U	2870	U	1220	U		602
Isopropylbenzene	U	250	U	122000	U	2870	U	1220	U		602
1,1,2,2-Tetrachloroethane	U	250	U	122000	U	2870	U	1220	U		602
1,2,3-Trichloropropane	U	250	U	122000	U	2870	U	1220	U		602
n-Propylbenzene	U	250	U	122000	U	2870	U	1220	U		602
Bromobenzene	U	250	U	122000	U	2870	U	1220	U		602
1,3,5-Trimethylbenzene	U	250	U	122000	U	2870	U	1220	U		602
2-Chlorotoluene	U	250	U	122000	U	2870	U	1220	U		602
4-Chlorotoluene	U	250	U	122000	U	2870	U	1220	U		602
tert-Butylbenzene	U	250	U	122000	U	2870	U	1220	U		602
1,2,4-Trimethylbenzene	U	250	U	122000	U	2870	U	1220	U		602
sec-Butylbenzene	U	250	U	122000	U	2870	U	1220	U		602
p-Isopropyltoluene	U	250	U	122000	U	2870	U	1220	U		602
1,3-Dichlorobenzene	U	250	U	122000	U	2870	U	1220	U		602
1,4-Dichlorobenzene	U	250	U	122000	U	2870	U	1220	U		602
n-Butylbenzene	U	250	U	122000	U	2870	U	1220	U		602
1,2-Dichlorobenzene	U	250	U	122000	U	2870	U	1220	U		602
1,2-Dibromo-3-chloropropane	U	250	U	122000	U	2870	U	1220	U		602
1,2,4-Trichlorobenzene	U	250	U	122000	U	2870	U	1220	U		602
Hexachlorobutadiene	U	250	U	122000	U	2870	U	1220	U		602
Naphthalene	U	250	U	122000	U	2870	U	1220	U		602
1,2,3-Trichlorobenzene	U	250	U	122000	U	2870	U	1220	U		602

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No:	MeOH Blank B 091206-4		A 15156 SB-044 20'		A 15160 SB-045 17.5'		A 15167 SB-046 16'		A 15178 SB-046 18.5'	
Location:	50		20000		10000		100		5000	
Dilution Factor	100		86		80		80		80	
Percent Solids										
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	250	U	116000	U	82500	U	625	U	31300
Chloromethane	U	250	U	116000	U	62500	U	625	U	31300
Vinyl Chloride	U	250	U	116000	U	62500	U	625	U	31300
Bromomethane	U	250	U	116000	U	62500	U	825	U	31300
Chloroethane	U	250	U	116000	U	62500	U	2500	U	125000
Trichlorofluoromethane	U	1000	U	465000	U	250000	U	625	U	31300
Acetone	U	250	U	116000	U	62500	U	625	U	31300
1,1-Dichloroethene	U	250	U	116000	U	62500	U	625	U	31300
Methylene Chloride	U	250	U	116000	U	62500	U	625	U	31300
Carbon Disulfide	U	250	U	116000	U	62500	U	625	U	31300
Methyl-t-butyl Ether	U	250	U	116000	U	62500	U	625	U	31300
trans-1,2-Dichloroethene	U	250	U	116000	U	62500	U	625	U	31300
1,1-Dichloroethane	U	250	U	116000	U	62500	U	625	U	31300
2-Butanone	U	250	U	116000	U	62500	U	625	U	31300
2,2-Dichloropropane	U	250	U	116000	U	62500	U	625	U	31300
cis-1,2-Dichloroethene	U	250	U	116000	U	62500	U	625	U	31300
Chloroform	U	250	U	116000	U	62500	U	625	U	31300
1,1-Dichloropropene	U	250	U	116000	U	62500	5360	625	296000	31300
1,2-Dichloroethane	U	250	4350000	116000	1090000	62500	U	625	U	31300
1,1,1-Trichloroethane	U	250	U	116000	U	62500	U	625	U	31300
Carbon Tetrachloride	U	250	U	116000	U	62500	209	625	U	31300
Benzene	U	250	U	116000	U	62500	U	625	U	31300
Trichloroethene	U	250	U	116000	U	62500	U	625	U	31300
1,2-Dichloropropane	U	250	U	116000	U	62500	U	625	U	31300
Bromodichloromethane	U	250	U	116000	U	62500	U	625	U	31300
Dibromomethane	U	250	U	116000	U	62500	U	625	U	31300
cis-1,3-Dichloropropene	U	250	U	116000	U	62500	U	625	U	31300
trans-1,3-Dichloropropene	U	250	U	116000	U	62500	U	625	U	31300
1,1,2-Trichloroethane	U	250	U	116000	U	62500	U	625	U	31300
1,3-Dichloropropane	U	250	U	116000	U	62500	U	625	U	31300
Dibromochloromethane	U	250	U	116000	U	62500	U	625	U	31300
1,2-Dibromoethane	U	250	U	116000	U	62500	U	625	U	31300
Bromoform	U	250	U	116000	U	62500	U	625	U	31300
4-Methyl-2-pentanone	U	250	U	116000	U	62500	U	625	U	31300
Toluene	U	250	U	116000	U	62500	U	625	U	31300
2-Hexanone	U	250	U	116000	U	62500	U	625	U	31300
Tetrachloroethene	U	250	U	116000	U	62500	U	625	U	31300
Chlorobenzene	U	250	U	116000	U	62500	U	625	U	31300
1,1,1,2-Tetrachloroethane	U	250	U	116000	U	62500	U	1250	U	62500
Ethylbenzene	U	500	U	233000	U	125000	U	625	U	31300
p,m-Xylene	U	250	U	116000	U	62500	U	625	U	31300
o-Xylene	U	250	U	116000	U	62500	U	625	U	31300
Styrene	U	250	U	116000	U	62500	U	625	U	31300
Isopropylbenzene	U	250	U	116000	U	62500	U	625	U	31300
1,1,2,2-Tetrachloroethane	U	250	U	116000	U	62500	U	625	U	31300
1,2,3-Trichloropropane	U	250	U	116000	U	62500	U	625	U	31300
n-Propylbenzene	U	250	U	116000	U	62500	U	625	U	31300
Bromobenzene	U	250	U	116000	U	62500	U	625	U	31300
1,3,5-Trimethylbenzene	U	250	U	116000	U	62500	U	625	U	31300
2-Chlorotoluene	U	250	U	116000	U	62500	U	625	U	31300
4-Chlorotoluene	U	250	U	116000	U	62500	U	625	U	31300
tert-Butylbenzene	U	250	U	116000	U	62500	U	625	U	31300
1,2,4-Trimethylbenzene	U	250	U	116000	U	62500	U	625	U	31300
sec-Butylbenzene	U	250	U	116000	U	62500	U	625	U	31300
p-Isopropyltoluene	U	250	U	116000	U	62500	U	625	U	31300
1,3-Dichlorobenzene	U	250	U	116000	U	62500	U	625	U	31300
1,4-Dichlorobenzene	U	250	U	116000	U	62500	U	625	U	31300
n-Butylbenzene	U	250	U	116000	U	62500	U	625	U	31300
1,2-Dichlorobenzene	U	250	U	116000	U	62500	U	625	U	31300
1,2-Dibromo-3-chloropropane	U	250	U	116000	U	62500	U	625	U	31300
1,2,4-Trichlorobenzene	U	250	U	116000	U	62500	U	625	U	31300
Hexachlorobutadiene	U	250	U	116000	U	62500	U	625	U	31300
Naphthalene	U	250	U	116000	U	62500	U	625	U	31300
1,2,3-Trichlorobenzene	U	250	U	116000	U	62500	U	625	U	31300

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No:	MeOH Blank B 091306-1		A 15188 SB-046 20'		A 15154 SB-051 19.5'		A 15194 SB-042 17.5'		A 15155 SB-044 18'	
Location:	50		500		500		4000		20000	
Dilution Factor	100		82		81		81		78	
Percent Solids										
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	250	U	3050	U	3090	U	24700	U	128000
Chloromethane	U	250	U	3050	U	3090	U	24700	U	128000
Vinyl Chloride	U	250	U	3050	U	3090	U	24700	U	128000
Bromomethane	U	250	U	3050	U	3090	U	24700	U	128000
Chloroethane	U	250	U	3050	U	3090	U	24700	U	128000
Trichlorofluoromethane	U	1000	U	12200	U	12300	U	98800	U	513000
Acetone	U	250	1350 J	3050	1930 J	3090	U	24700	U	128000
1,1-Dichloroethene	U	250	U	3050	U	3090	U	24700	U	128000
Methylene Chloride	U	250	U	3050	U	3090	U	24700	U	128000
Carbon Disulfide	U	250	U	3050	U	3090	U	24700	U	128000
Methyl-t-butyl Ether	U	250	U	3050	U	3090	U	24700	U	128000
trans-1,2-Dichloroethene	U	250	U	3050	U	3090	U	24700	U	128000
1,1-Dichloroethane	U	250	U	3050	U	3090	U	24700	U	128000
2-Butanone	U	250	U	3050	U	3090	U	24700	U	128000
2,2-Dichloropropane	U	250	U	3050	U	3090	U	24700	U	128000
cis-1,2-Dichloroethene	U	250	U	3050	U	3090	U	24700	U	128000
Chloroform	U	250	U	3050	U	3090	U	24700	U	128000
1,1-Dichloropropene	U	250	U	3050	U	3090	U	24700	U	128000
1,2-Dichloroethane	U	250	5300	3050	39400	3090	285000	24700	3200000	128000
1,1,1-Trichloroethane	U	250	U	3050	U	3090	U	24700	U	128000
Carbon Tetrachloride	U	250	U	3050	U	3090	U	24700	U	128000
Benzene	U	250	3590	3050	1380 J	3090	U	24700	U	128000
Trichloroethene	U	250	U	3050	U	3090	U	24700	U	128000
1,2-Dichloropropane	U	250	U	3050	U	3090	U	24700	U	128000
Bromodichloromethane	U	250	U	3050	U	3090	U	24700	U	128000
Dibromomethane	U	250	U	3050	U	3090	U	24700	U	128000
cis-1,3-Dichloropropene	U	250	U	3050	U	3090	U	24700	U	128000
trans-1,3-Dichloropropene	U	250	U	3050	U	3090	U	24700	U	128000
1,1,2-Trichloroethane	U	250	U	3050	U	3090	U	24700	U	128000
1,3-Dichloropropane	U	250	U	3050	U	3090	U	24700	U	128000
Dibromochloromethane	U	250	U	3050	U	3090	U	24700	U	128000
1,2-Dibromoethane	U	250	U	3050	U	3090	U	24700	U	128000
Bromoform	U	250	U	3050	U	3090	U	24700	U	128000
4-Methyl-2-pentanone	U	250	U	3050	U	3090	U	24700	U	128000
Toluene	U	250	U	3050	U	3090	U	24700	U	128000
2-Hexanone	U	250	J	3050	U	3090	U	24700	U	128000
Tetrachloroethene	U	250	J	3050	U	3090	U	24700	U	128000
Chlorobenzene	U	250	J	3050	U	3090	U	24700	U	128000
1,1,1,2-Tetrachloroethane	U	250	J	3050	U	3090	U	49400	U	256000
Ethylbenzene	U	500	U	6100	U	6170	U	24700	U	128000
p&m-Xylene	U	250	U	3050	U	3090	U	24700	U	128000
o-Xylene	U	250	U	3050	U	3090	U	24700	U	128000
Styrene	U	250	U	3050	U	3090	U	24700	U	128000
Isopropylbenzene	U	250	U	3050	U	3090	U	24700	U	128000
1,1,2,2-Tetrachloroethane	U	250	U	3050	U	3090	U	24700	U	128000
1,2,3-Trichloropropane	U	250	U	3050	U	3090	U	24700	U	128000
n-Propylbenzene	U	250	U	3050	U	3090	U	24700	U	128000
Bromobenzene	U	250	U	3050	U	3090	U	24700	U	128000
1,3,5-Trimethylbenzene	U	250	U	3050	U	3090	U	24700	U	128000
2-Chlorotoluene	U	250	U	3050	U	3090	U	24700	U	128000
4-Chlorotoluene	U	250	U	3050	U	3090	U	24700	U	128000
tert-Butylbenzene	U	250	U	3050	U	3090	U	24700	U	128000
1,2,4-Trimethylbenzene	U	250	U	3050	U	3090	U	24700	U	128000
sec-Butylbenzene	U	250	U	3050	U	3090	U	24700	U	128000
p-Isopropyltoluene	U	250	U	3050	U	3090	U	24700	U	128000
1,3-Dichlorobenzene	U	250	U	3050	U	3090	U	24700	U	128000
1,4-Dichlorobenzene	U	250	U	3050	U	3090	U	24700	U	128000
n-Butylbenzene	U	250	U	3050	U	3090	U	24700	U	128000
1,2-Dichlorobenzene	U	250	U	3050	U	3090	U	24700	U	128000
1,2-Dibromo-3-chloropropane	U	250	U	3050	U	3090	U	24700	U	128000
1,2,4-Trichlorobenzene	U	250	U	3050	U	3090	U	24700	U	128000
Hexachlorobutadiene	U	250	U	3050	U	3090	U	24700	U	128000
Naphthalene	U	250	U	3050	U	3090	U	24700	U	128000
1,2,3-Trichlorobenzene	U	250	U	3050	U	3090	U	24700	U	128000

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No:	Soil Blank A 091208-4		A 04108 SB-034 7.5'		A 04110 SB-035 7.5'		A 15157 SB-043 20.5'		A 15179 SB-047 20'	
	1 100		1 86		5 83		10 80		5 80	
Location:										
Dilution Factor										
Percent Solids										
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	5.81	U	30.1	U	62.5	U	31.3
Chloromethane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Vinyl Chloride	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Bromomethane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Chloroethane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Trichlorofluoromethane	U	20.0	U	23.3	U	120	153 J	250	168 J	125
Acetone	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,1-Dichloroethene	U	5.00	U	5.81	U	30.1	17.5 J	62.5	19.3 J	31.3
Methylene Chloride	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Carbon Disulfide	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Methyl-t-butyl Ether	U	5.00	U	5.81	U	30.1	76.5 J	62.5	166 J	31.3
trans-1,2-Dichloroethene	U	5.00	U	5.81	U	30.1	21.5 J	62.5	26.1 J	31.3
1,1-Dichloroethane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
2-Butanone	U	5.00	U	5.81	U	30.1	U	62.5	13.3 J	31.3
2,2-Dichloropropane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
cis-1,2-Dichloroethene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Chloroform	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,1-Dichloropropene	U	5.00	U	5.81	U	30.1	1650 J	62.5	164 J	31.3
1,2-Dichloroethane	1.65 J	5.00	76.9	5.81	305	30.1	U	62.5	U	31.3
1,1,1-Trichloroethane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Carbon Tetrachloride	U	5.00	U	5.81	U	30.1	55.3 J	82.5	135 J	31.3
Benzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Trichloroethene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,2-Dichloropropane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Bromodichloromethane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Dibromomethane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
cis-1,3-Dichloropropene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
trans-1,3-Dichloropropene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,1,2-Trichloroethane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,3-Dichloropropane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Dibromochloromethane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,2-Dibromoethane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Bromoform	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
4-Methyl-2-pentanone	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Toluene	U	5.00	U	5.81	U	30.1	16.6 J	62.5	24.9 J	31.3
2-Hexanone	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Tetrachloroethene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Chlorobenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,1,1,2-Tetrachloroethane	U	5.00	U	5.81	U	30.1	U	125	U	62.5
Ethylbenzene	U	10.0	U	11.6	U	60.2	U	62.5	U	31.3
p&m-Xylene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
o-Xylene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Styrene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Isopropylbenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,1,2,2-Tetrachloroethane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,2,3-Trichloropropane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
n-Propylbenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Bromobenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,3,5-Trimethylbenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
2-Chlorotoluene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
4-Chlorotoluene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
tert-Butylbenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,2,4-Trimethylbenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
sec-Butylbenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
p-Isopropyltoluene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,3-Dichlorobenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,4-Dichlorobenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
n-Butylbenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,2-Dichlorobenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,2-Dibromo-3-chloropropane	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,2,4-Trichlorobenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Hexachlorobutadiene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
Naphthalene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3
1,2,3-Trichlorobenzene	U	5.00	U	5.81	U	30.1	U	62.5	U	31.3

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Result Based on Dry Weight

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Method: REAC SOP 1807

Sample No: Soil Blank A 091206-4 A 15.77  
Location: SB-04; 20'  
Dilution Factor: 1 2  
Percent Solids: 100 81

Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	5.00	U	12.3
Chloromethane	U	5.00	U	12.3
Vinyl Chloride	U	5.00	U	12.3
Bromomethane	U	5.00	U	12.3
Chloroethane	U	5.00	U	12.3
Trichlorofluoromethane	U	20.0	38.0	J 49.4
Acetone	U	5.00	5.95	J 12.3
1,1-Dichloroethene	U	5.00	3.88	J 12.3
Methylene Chloride	U	5.00	8.40	J 12.3
Carbon Disulfide	U	5.00	U	12.3
Methyl-t-butyl Ether	U	5.00	U	12.3
trans-1,2-Dichloroethene	U	5.00	U	12.3
1,1-Dichloroethane	U	5.00	U	12.3
2-Butanone	U	5.00	U	12.3
2,2-Dichloropropane	U	5.00	6.59	J 12.3
cis-1,2-Dichloroethene	U	5.00	U	12.3
Chloroform	U	5.00	U	12.3
1,1-Dichloropropene	U	5.00	U	12.3
1,2-Dichloroethane	1.85	J 5.00	35.8	J 12.3
1,1,1-Trichloroethane	U	5.00	U	12.3
Carbon Tetrachloride	U	5.00	U	12.3
Benzene	U	5.00	64.0	J 12.3
Trichloroethene	U	5.00	U	12.3
1,2-Dichloropropane	U	5.00	U	12.3
Bromodichloromethane	U	5.00	U	12.3
Dibromomethane	U	5.00	U	12.3
cis-1,3-Dichloropropene	U	5.00	U	12.3
trans-1,3-Dichloropropene	U	5.00	U	12.3
1,1,2-Trichloroethane	U	5.00	U	12.3
1,3-Dichloropropane	U	5.00	U	12.3
Dibromochloromethane	U	5.00	U	12.3
1,2-Dibromoethane	U	5.00	U	12.3
Bromoform	U	5.00	U	12.3
4-Methyl-2-pentanone	U	5.00	U	12.3
Toluene	U	5.00	U	12.3
2-Hexanone	U	5.00	U	12.3
Tetrachloroethene	U	5.00	U	12.3
Chlorobenzene	U	5.00	U	12.3
1,1,1,2-Tetrachloroethane	U	5.00	U	12.3
Ethylbenzene	U	10.0	U	24.7
p&m-Xylene	U	5.00	U	12.3
o-Xylene	U	5.00	U	12.3
Styrene	U	5.00	U	12.3
Isopropylbenzene	U	5.00	U	12.3
1,1,2,2-Tetrachloroethane	U	5.00	U	12.3
1,2,3-Trichloropropane	U	5.00	U	12.3
n-Propylbenzene	U	5.00	J	12.3
Bromobenzene	U	5.00	J	12.3
1,3,5-Trimethylbenzene	U	5.00	J	12.3
2-Chlorotoluene	U	5.00	U	12.3
4-Chlorotoluene	U	5.00	U	12.3
tert-Butylbenzene	U	5.00	U	12.3
1,2,4-Trimethylbenzene	U	5.00	U	12.3
sec-Butylbenzene	U	5.00	U	12.3
p-Isopropyltoluene	U	5.00	U	12.3
1,3-Dichlorobenzene	U	5.00	U	12.3
1,4-Dichlorobenzene	U	5.00	U	12.3
n-Butylbenzene	U	5.00	U	12.3
1,2-Dichlorobenzene	U	5.00	U	12.3
1,2-Dibromo-3-chloropropane	U	5.00	U	12.3
1,2,4-Trichlorobenzene	U	5.00	U	12.3
Hexachlorobutadiene	U	5.00	U	12.3
Naphthalene	U	5.00	U	12.3
1,2,3-Trichlorobenzene	U	5.00	U	12.3

rv2370

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No: Soil Blank A 091306-2 A 04112  
Location: SB-037 6'  
Dilution Factor: 1 2  
Percent Solids: 100 85

Analyte	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	5.00	U	11.8
Chloromethane	U	5.00	U	11.8
Vinyl Chloride	U	5.00	U	11.8
Bromomethane	U	5.00	U	11.8
Chloroethane	U	5.00	U	11.8
Trichlorofluoromethane	U	20.0	U	47.1
Acetone	U	5.00	U	11.8
1,1-Dichloroethene	U	5.00	U	11.8
Methylene Chloride	U	5.00	U	11.8
Carbon Disulfide	U	5.00	U	11.8
Methyl-1-butyl Ether	U	5.00	U	11.8
trans-1,2-Dichloroethene	U	5.00	U	11.8
1,1-Dichloroethane	U	5.00	U	11.8
2-Butanone	U	5.00	U	11.8
2,2-Dichloropropane	U	5.00	U	11.8
cis-1,2-Dichloroethene	U	5.00	U	11.8
Chloroform	U	5.00	U	11.8
1,1-Dichloropropene	U	5.00	U	11.8
1,2-Dichloroethane	2.01	J 5.00	80.3	J 11.8
1,1,1-Trichloroethene	U	5.00	U	11.8
Carbon Tetrachloride	U	5.00	U	11.8
Benzene	U	5.00	U	11.8
Trichloroethene	U	5.00	U	11.8
1,2-Dichloropropane	U	5.00	U	11.8
Bromodichloromethane	U	5.00	U	11.8
Dibromomethane	U	5.00	U	11.8
cis-1,3-Dichloropropene	U	5.00	U	11.8
trans-1,3-Dichloropropene	U	5.00	U	11.8
1,1,2-Trichloroethane	U	5.00	U	11.8
1,3-Dichloropropane	U	5.00	U	11.8
Dibromochloromethane	U	5.00	U	11.8
1,2-Dibromoethane	U	5.00	U	11.8
Bromoform	U	5.00	U	11.8
4-Methyl-2-pentanone	U	5.00	U	11.8
Toluene	U	5.00	U	11.8
2-Hexanone	U	5.00	U	11.8
Tetrachloroethene	U	5.00	U	11.8
Chlorobenzene	U	5.00	U	11.8
1,1,1,2-Tetrachloroethane	U	5.00	U	11.8
Ethylbenzene	U	10.0	U	23.5
p&m-Xylene	U	5.00	U	11.8
o-Xylene	U	5.00	U	11.8
Styrene	U	5.00	U	11.8
Isopropylbenzene	U	5.00	U	11.8
1,1,2,2-Tetrachloroethane	U	5.00	U	11.8
1,2,3-Trichloropropane	U	5.00	U	11.8
n-Propylbenzene	U	5.00	U	11.8
Bromobenzene	U	5.00	U	11.8
1,3,5-Trimethylbenzene	U	5.00	U	11.8
2-Chlorotoluene	U	5.00	U	11.8
4-Chlorotoluene	U	5.00	U	11.8
tert-Butylbenzene	U	5.00	U	11.8
1,2,4-Trimethylbenzene	U	5.00	U	11.8
sec-Butylbenzene	U	5.00	U	11.8
p-Isopropyltoluene	U	5.00	U	11.8
1,3-Dichlorobenzene	U	5.00	U	11.8
1,4-Dichlorobenzene	U	5.00	U	11.8
n-Butylbenzene	U	5.00	U	11.8
1,2-Dichlorobenzene	U	5.00	U	11.8
1,2-Dibromo-3-chloropropane	U	5.00	U	11.8
1,2,4-Trichlorobenzene	U	5.00	U	11.8
Hexachlorobutadiene	U	5.00	U	11.8
Naphthalene	U	5.00	U	11.8
1,2,3-Trichlorobenzene	U	5.00	U	11.8

W2371

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No:	Soil Blank A 091506-2		A 15180 SB-049 21'		A 15166 SB-050 19.5'		15153 SB055-19'		15161 SB053-19'	
Location:	1		10		1		2		1	
Dilution Factor	100		79		86		82		81	
Percent Solids										
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	63.3	U	5.81	U	12.2	U	6.17
Chloromethane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Vinyl Chloride	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Bromomethane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Chloroethane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Trichlorofluoromethane	U	5.00	U	63.3	U	5.81	U	48.8	U	24.7
Acetone	U	20.0	38.1	253	8.02	23.3	3.41	12.2	U	6.17
1,1-Dichloroethene	U	5.00	22.3	63.3	U	5.81	U	12.2	U	6.17
Methylene Chloride	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Carbon Disulfide	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Methyl-t-butyl Ether	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
trans-1,2-Dichloroethene	U	5.00	35.2	63.3	U	5.81	U	12.2	U	6.17
1,1-Dichloroethane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
2-Butanone	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
2,2-Dichloropropane	U	5.00	U	63.3	U	5.81	29.8	12.2	U	6.17
cis-1,2-Dichloroethene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Chloroform	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,1-Dichloropropene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,2-Dichloroethane	2.38	U	272	63.3	U	5.81	55.3	12.2	U	6.17
1,1,1-Trichloroethane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Carbon Tetrachloride	U	5.00	U	63.3	U	5.81	U	12.2	9.42	6.17
Benzene	U	5.00	867	63.3	7.73	38.2	U	12.2	U	6.17
Trichloroethene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,2-Dichloropropane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Bromodichloromethane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Dibromomethane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
cis-1,3-Dichloropropene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
trans-1,3-Dichloropropene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,1,2-Trichloroethane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,3-Dichloropropane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Dibromochloromethane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,2-Dibromoethane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Bromoform	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
4-Methyl-2-pentanone	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Toluene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
2-Hexanone	U	5.00	36.3	63.3	U	5.81	U	12.2	U	6.17
Tetrachloroethene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Chlorobenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,1,1,2-Tetrachloroethane	U	5.00	U	63.3	U	5.81	U	24.4	U	12.3
Ethylbenzene	U	10.0	U	127	U	11.6	U	12.2	U	6.17
p&m-Xylene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
o-Xylene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Styrene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Isopropylbenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,1,2,2-Tetrachloroethane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,2,3-Trichloropropane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
n-Propylbenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Bromobenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,3,5-Trimethylbenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
2-Chlorotoluene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
4-Chlorotoluene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
tert-Butylbenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,2,4-Trimethylbenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
sec-Butylbenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
p-Isopropyltoluene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,3-Dichlorobenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,4-Dichlorobenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
n-Butylbenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,2-Dichlorobenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,2-Dibromo-3-chloropropane	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,2,4-Trichlorobenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Hexachlorobutadiene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
Naphthalene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17
1,2,3-Trichlorobenzene	U	5.00	U	63.3	U	5.81	U	12.2	U	6.17

rv2372

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Method: REAC SOP 1807		Soil Blank A 091506-2		15163 SB054-20'		15164 SB052-7.5'		15165 SB056-19.5'		15162 SB052-19.5'	
Sample No:											
Location:											
Dilution Factor		1		1		1		1		10	
Percent Solids		100		81		86		81		80	
	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	Result µg/Kg
Analyte											
Dichlorodifluoromethane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Chloromethane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Vinyl Chloride	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Bromomethane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Chloroethane	U	5.00	U	6.17	R	5.81	U	24.7	U		250
Trichlorofluoromethane	U	20.0	36.1	24.7	R	23.3	U	6.17	53.9	J	62.5
Acetone	U	5.00	U	6.17	R	5.81	7.25	6.17	U		62.5
1,1-Dichloroethene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Methylene Chloride	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Carbon Disulfide	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Methyl-t-butyl Ether	U	5.00	U	6.17	R	5.81	U	6.17	16.3	J	62.5
trans-1,2-Dichloroethene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,1-Dichloroethane	U	5.00	3.51	J	6.17	5.81	U	6.17	U		62.5
2-Butanone	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
2,2-Dichloropropane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
cis-1,2-Dichloroethene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Chloroform	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,1-Dichloropropene	U	5.00	U	6.17	R	5.81	U	6.17	1340	J	62.5
1,2-Dichloroethane	2.36	J	5.00	U	6.17	5.81	250	6.17	U		62.5
1,1,1-Trichloroethane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Carbon Tetrachloride	U	5.00	U	6.17	R	5.81	U	6.17	28.1	J	62.5
Benzene	U	5.00	29.9	6.17	4.37	J	5.81	122	6.17	U	62.5
Trichloroethene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,2-Dichloropropane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Bromodichloromethane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Dibromomethane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
cis-1,3-Dichloropropene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
trans-1,3-Dichloropropene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,1,2-Trichloroethane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,3-Dichloropropane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Dibromochloromethane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,2-Dibromoethane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Bromoform	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
4-Methyl-2-pentanone	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Toluene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
2-Hexanone	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Tetrachloroethene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Chlorobenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,1,1,2-Tetrachloroethane	U	5.00	U	6.17	R	5.81	U	12.3	U		125
Ethylbenzene	U	10.0	U	12.3	R	11.6	U	6.17	U		62.5
p&m-Xylene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
o-Xylene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Styrene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Isopropylbenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,1,2,2-Tetrachloroethane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,2,3-Trichloropropane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
n-Propylbenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Bromobenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,3,5-Trimethylbenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
2-Chlorotoluene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
4-Chlorotoluene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
tert-Butylbenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,2,4-Trimethylbenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
sec-Butylbenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
p-Isopropyltoluene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,3-Dichlorobenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,4-Dichlorobenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
n-Butylbenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,2-Dichlorobenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,2-Dibromo-3-chloropropane	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,2,4-Trichlorobenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Hexachlorobutadiene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
Naphthalene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5
1,2,3-Trichlorobenzene	U	5.00	U	6.17	R	5.81	U	6.17	U		62.5

m2373

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
VWA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No	Soil Blank B 082506-2		04131 SB-001-0.8'		04182 SB-001-5'		04183 SB-001-10'		04184 SB-001-12'	
Location	1		1		1		1		1	
Dilution Factor	100		94		94		84		85	
Percent Solids										
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	5.32	U	5.32	U	5.95	U	5.88
Chloromethane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Vinyl Chloride	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Bromomethane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Chloroethane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Trichlorofluoromethane	U	20.0	U	21.3	U	21.3	9.99	23.8	167	23.5
Acetone	U	5.00	U	5.32	9.30	5.32	1.75	5.95	1.72	5.88
1,1-Dichloroethene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Methylene Chloride	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Carbon Disulfide	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Methyl-t-butyl Ether	U	5.00	U	5.32	7.52	5.32	1.57	5.95	U	5.88
trans-1,2-Dichloroethene	U	5.00	U	5.32	132	5.32	3.81	5.95	49.9	5.88
1,1-Dichloroethane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
2-Butanone	U	5.00	U	5.32	U	5.32	U	5.95	767	58.8
2,2-Dichloropropane	U	5.00	3.97	5.32	528	53.2	147	5.95	U	5.88
cis-1,2-Dichloroethene	U	5.00	U	5.32	1.46	5.32	U	5.95	U	5.88
Chloroform	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,1-Dichloropropene	U	5.00	U	5.32	U	5.32	U	5.95	78.3	5.88
1,2-Dichloroethane	U	5.00	17.8	5.32	403	53.2	81.4	5.95	U	5.88
1,1,1-Trichloroethane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Carbon Tetrachloride	U	5.00	U	5.32	U	5.32	U	5.95	234	58.8
Benzene	U	5.00	44.7	5.32	627	53.2	80.3	5.95	U	5.88
Trichloroethene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,2-Dichloropropane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Bromodichloromethane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Dibromomethane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
cis-1,3-Dichloropropene	U	5.00	U	5.32	U	5.32	U	5.95	4.04	5.88
trans-1,3-Dichloropropene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,1,2-Trichloroethane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,3-Dichloropropane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Dibromochloromethane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,2-Dibromoethane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Bromoform	U	5.00	U	5.32	U	5.32	U	5.95	67.4	5.88
4-Methyl-2-pentanone	U	5.00	U	5.32	3.05	5.32	3.46	5.95	U	5.88
Toluene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
2-Hexanone	U	5.00	U	5.32	7.24	5.32	U	5.95	U	5.88
Tetrachloroethene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Chlorobenzene	U	5.00	U	5.32	U	5.32	U	5.95	1.74	5.88
1,1,1,2-Tetrachloroethane	U	5.00	U	5.32	U	5.32	U	5.95	7.54	11.8
Ethylbenzene	U	10.0	U	10.6	U	10.8	U	11.9	4.53	5.88
p&m-Xylene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
o-Xylene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Styrene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Isopropylbenzene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,1,2,2-Tetrachloroethane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,2,3-Trichloropropane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
n-Propylbenzene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Bromobenzene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,3,5-Trimethylbenzene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
2-Chlorotoluene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
4-Chlorotoluene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
tert-Butylbenzene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,2,4-Trimethylbenzene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
sec-Butylbenzene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
p-Isopropyltoluene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,3-Dichlorobenzene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,4-Dichlorobenzene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
n-Butylbenzene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,2-Dichlorobenzene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,2-Dibromo-3-chloropropane	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,2,4-Trichlorobenzene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Hexachlorobutadiene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
Naphthalene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88
1,2,3-Trichlorobenzene	U	5.00	U	5.32	U	5.32	U	5.95	U	5.88

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

Method: REAC SOP 1807

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Sample No	Soil Blank B 082506-2		04185		04186		04187		04188	
Location			SB-001-15'		SB-001-17.5'		SB-001-20'		SB-001-22.5'	
Dilution Factor	1		1		1		1		1	
Percent Solids	100		83		82		83		82	
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	8.10	U	6.02	U	6.10
Chloromethane	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Vinyl Chloride	U	5.00	2.93 J	6.02	U	6.10	U	6.02	U	6.10
Bromomethane	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Chloroethane	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Trichlorofluoromethane	U	5.00	24.6	6.02	9.82	6.10	49.2	6.02	203	6.10
Acetone	U	20.0	117	24.1	83.0	24.4	37.4	24.1	88.0	24.4
1,1-Dichloroethene	U	5.00	233	6.02	182	6.10	466 J	6.02	901	6.10
Methylene Chloride	U	5.00	145	6.02	157	6.10	42.0	6.02	180	6.10
Carbon Disulfide	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Methyl-t-butyl Ether	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
trans-1,2-Dichloroethene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
1,1-Dichloroethane	U	5.00	58.4	6.02	27.9	6.10	12.2	6.02	28.8	6.10
2-Butanone	U	5.00	31.3	6.02	11.3	6.10	U	6.02	U	6.10
2,2-Dichloropropane	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
cis-1,2-Dichloroethene	U	5.00	1040	602	719 J	6.10	71.4	6.02	177	6.10
Chloroform	U	5.00	3.92 J	6.02	4.01 J	6.10	1.77 J	6.02	4.34 J	6.10
1,1-Dichloropropene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
1,2-Dichloroethane	U	5.00	2.94 J	6.02	3.61 J	6.10	U	6.02	3.28 J	6.10
1,1,1-Trichloroethane	U	5.00	2620	1200	5190	6.10	793	602	2550	6.10
Carbon Tetrachloride	U	5.00	U	6.02	U	6.10	U	6.02	3.99 J	6.10
Benzene	U	5.00	2.80 J	6.02	3.45 J	6.10	2.39 J	6.02	5.80 J	6.10
Trichloroethene	U	5.00	12900 J	602	4230	6.10	2540	602	8110	6.10
1,2-Dichloropropane	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Bromodichloromethane	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Dibromomethane	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
cis-1,3-Dichloropropene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
trans-1,3-Dichloropropene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
1,1,2-Trichloroethane	U	5.00	13.4	6.02	17.9	6.10	9.47	6.02	U	6.10
1,3-Dichloropropane	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Dibromochloromethane	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
1,2-Dibromoethane	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Bromoform	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
4-Methyl-2-pentanone	U	5.00	7.53	6.02	U	6.10	U	6.02	U	6.10
Toluene	U	5.00	259 J	602	313 J	6.10	321 J	6.02	634	6.10
2-Hexanone	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Tetrachloroethene	U	5.00	U	6.02	U	6.10	U	6.02	1.65 J	6.10
Chlorobenzene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
1,1,1,2-Tetrachloroethane	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Ethylbenzene	U	5.00	14.5	6.02	11.0	6.10	7.30	6.02	21.9	6.10
p&m-Xylene	U	10.0	68.7	12.0	57.5	12.2	41.1	12.0	109	12.2
o-Xylene	U	5.00	23.4	6.02	18.4	6.10	9.42	6.02	26.4	6.10
Styrene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Isopropylbenzene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
1,1,2,2-Tetrachloroethane	U	5.00	2.46 J	6.02	3.33 J	6.10	U	6.02	4.56 J	6.10
1,2,3-Trichloropropane	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
n-Propylbenzene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Bromobenzene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
1,3,5-Trimethylbenzene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
2-Chlorotoluene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
4-Chlorotoluene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
tert-Butylbenzene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
1,2,4-Trimethylbenzene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
sec-Butylbenzene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
p-Isopropyltoluene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
1,3-Dichlorobenzene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
1,4-Dichlorobenzene	U	5.00	U	6.02	2.89 J	6.10	1.53 J	6.02	U	6.10
n-Butylbenzene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
1,2-Dichlorobenzene	U	5.00	7.96	6.02	20.0	6.10	11.4	6.02	3.15	6.10
1,2-Dibromo-3-chloropropane	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
1,2,4-Trichlorobenzene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Hexachlorobutadiene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
Naphthalene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10
1,2,3-Trichlorobenzene	U	5.00	U	6.02	U	6.10	U	6.02	U	6.10



Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-19& Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No Location Dilution Factor Percent Solids	Soil Blank B 082606-2		04198 SB-001-24'		04199 SB-001-25'		04200 SB-001-25-30'		15134 SB-001-30'	
	1 100		1 78		1 85		1 41		1 85	
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	6.41	U	5.88	U	12.2	U	5.88
Chloromethane	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
Vinyl Chloride	U	5.00	U	6.41	U	5.88	19.6	12.2	U	5.88
Bromomethane	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
Chloroethane	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
Trichlorofluoromethane	U	5.00	225	6.41	88.7	5.88	93.2	12.2	U	5.88
Acetone	U	20.0	110	25.6	25.3	23.5	26.1	J 48.8	U	23.5
1,1-Dichloroethene	U	5.00	693	256	978	J 5.88	510	122	26.0	5.88
Methylene Chloride	U	5.00	186	6.41	14.1	5.88	U	12.2	U	5.88
Carbon Disulfide	U	5.00	U	6.41	U	5.88	3.90	J 12.2	U	5.88
Methyl-t-butyl Ether	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
trans-1,2-Dichloroethene	U	5.00	34.3	6.41	37.7	5.88	62.2	12.2	1.82	J 5.88
1,1-Dichloroethane	U	5.00	9.29	6.41	3.24	J 5.88	U	12.2	U	5.88
2-Butanone	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
2,2-Dichloropropane	U	5.00	300	256	629	J 5.88	258	12.2	10.2	5.88
cis-1,2-Dichloroethene	U	5.00	6.44	6.41	U	5.88	U	12.2	U	5.88
Chloroform	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
1,1-Dichloropropene	U	5.00	5.72	J 6.41	U	5.88	U	12.2	U	5.88
1,2-Dichloroethane	U	5.00	4040	256	768	J 5.88	776	122	93.9	5.88
1,1,1-Trichloroethane	U	5.00	2.68	J 6.41	U	5.88	U	12.2	U	5.88
Carbon Tetrachloride	U	5.00	9.53	6.41	U	5.88	U	12.2	U	5.88
Benzene	U	5.00	36000	1280	2190	588	1790	122	165	5.88
Trichloroethene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
1,2-Dichloropropane	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
Bromodichloromethane	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
Dibromomethane	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
cis-1,3-Dichloropropene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
trans-1,3-Dichloropropene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
1,1,2-Trichloroethane	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
1,3-Dichloropropane	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
Dibromochloromethane	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
1,2-Dibromoethane	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
Bromoform	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
4-Methyl-2-pentanone	U	5.00	4920	1280	383	J 5.88	59.8	12.2	4.58	J 5.88
Toluene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
2-Hexanone	U	5.00	21.0	6.41	6.20	5.88	5.85	J 12.2	U	5.88
Tetrachloroethene	U	5.00	3.35	J 6.41	U	5.88	U	12.2	U	5.88
Chlorobenzene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
1,1,1,2-Tetrachloroethane	U	5.00	211	6.41	20.6	5.88	U	12.2	U	5.88
Ethylbenzene	U	5.00	2200	256	86.7	11.8	5.22	J 24.4	U	11.8
p&m-Xylene	U	10.0	208	6.41	18.7	5.88	U	12.2	U	5.88
o-Xylene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
Styrene	U	5.00	1.71	J 6.41	U	5.88	U	12.2	U	5.88
Isopropylbenzene	U	5.00	8.58	6.41	U	5.88	U	12.2	U	5.88
1,1,2,2-Tetrachloroethane	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
1,2,3-Trichloropropane	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
n-Propylbenzene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
Bromobenzene	U	5.00	3.97	J 6.41	U	5.88	U	12.2	U	5.88
1,3,5-Trimethylbenzene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
2-Chlorotoluene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
4-Chlorotoluene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
tert-Butylbenzene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
1,2,4-Trimethylbenzene	U	5.00	1.05	6.41	U	5.88	U	12.2	U	5.88
sec-Butylbenzene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
p-Isopropyltoluene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
1,3-Dichlorobenzene	U	5.00	6.35	J 6.41	8.45	5.88	29.4	12.2	2.05	J 5.88
1,4-Dichlorobenzene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
n-Butylbenzene	U	5.00	38.5	6.41	41.1	5.88	70.3	12.2	5.20	J 5.88
1,2-Dichlorobenzene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
1,2-Dibromo-3-chloropropane	U	5.00	U	6.41	U	5.88	11.6	J 12.2	U	5.88
1,2,4-Trichlorobenzene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
Hexachlorobutadiene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
Naphthalene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88
1,2,3-Trichlorobenzene	U	5.00	U	6.41	U	5.88	U	12.2	U	5.88

Table 1 2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No	Soil Blank B 082606-2		19154 SB-002-5'		19155 SB-002-10'		19156 SB-002-10'dup		19157 SB-002-15'	
Location	1		1		1		1		1	
Dilution Factor	100		93		81		77		82	
Percent Solids										
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	5.38	U	6.17	U	6.49	U	6.10
Chloromethane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Vinyl Chloride	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Bromomethane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Chloroethane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Trichlorofluoromethane	U	5.00	U	5.38	U	24.7	U	26.0	U	24.4
Acetone	U	20.0	U	21.5	U	6.17	U	6.49	1.56	J
1,1-Dichloroethene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Methylene Chloride	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Carbon Disulfide	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Methyl-t-butyl Ether	U	5.00	2.18	J	5.38	U	6.17	U	6.49	U
trans-1,2-Dichloroethene	U	5.00	3.61	J	5.38	3.00	J	6.17	1.95	J
1,1-Dichloroethane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
2-Butanone	U	5.00	U	5.38	U	6.17	U	6.49	537	J
2,2-Dichloropropane	U	5.00	204	26.9	204	6.17	143	6.49	U	6.10
cis-1,2-Dichloroethene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Chloroform	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,1-Dichloropropene	U	5.00	U	5.38	U	6.17	147	6.49	94.4	6.10
1,2-Dichloroethane	U	5.00	34.7	5.38	105	6.17	U	6.49	U	6.10
1,1,1-Trichloroethane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Carbon Tetrachloride	U	5.00	U	5.38	U	6.17	U	6.49	152	6.10
Benzene	U	5.00	59.8	J	5.38	112	6.17	U	6.49	U
Trichloroethene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,2-Dichloropropane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Bromodichloromethane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Dibromomethane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
cis-1,3-Dichloropropene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
trans-1,3-Dichloropropene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,1,2-Trichloroethane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,3-Dichloropropane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Dibromochloromethane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,2-Dibromoethane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Bromoform	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
4-Methyl-2-pentanone	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Toluene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
2-Hexanone	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Tetrachloroethene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Chlorobenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,1,1,2-Tetrachloroethane	U	5.00	U	5.38	U	6.17	U	13.0	U	12.2
Ethylbenzene	U	10.0	U	10.8	U	12.3	U	6.49	U	6.10
p&m-Xylene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
o-Xylene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Styrene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Isopropylbenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,1,2,2-Tetrachloroethane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,2,3-Trichloropropane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
n-Propylbenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Bromobenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,3,5-Trimethylbenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
2-Chlorotoluene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
4-Chlorotoluene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
tert-Butylbenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,2,4-Trimethylbenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
sec-Butylbenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
p-Isopropyltoluene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,3-Dichlorobenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,4-Dichlorobenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
n-Butylbenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,2-Dichlorobenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,2-Dibromo-3-chloropropane	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,2,4-Trichlorobenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Hexachlorobutadiene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
Naphthalene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10
1,2,3-Trichlorobenzene	U	5.00	U	5.38	U	6.17	U	6.49	U	6.10

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No Location Dilution Factor Percent Solids	Soil Blank 6 082606-2		19158 SB-002-20		19159 SB-003-10		19160 SB-003-15	
	1 100		1 83		1 87		1 83	
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
Dichlorodifluoromethane	U	5.00	U	6.02	U	5.75	U	6.02
Chloromethane	U	5.00	U	6.02	U	5.75	U	6.02
Vinyl Chloride	U	5.00	3.19	6.02	U	5.75	U	6.02
Bromomethane	U	5.00	U	6.02	U	5.75	U	6.02
Chloroethane	U	5.00	U	6.02	U	5.75	U	6.02
Trichlorofluoromethane	U	20.0	U	24.1	U	23.0	U	24.1
Acetone	U	5.00	19.3	6.02	U	5.75	3.08	6.02
1,1-Dichloroethene	U	5.00	U	6.02	U	5.75	U	6.02
Methylene Chloride	U	5.00	U	6.02	U	5.75	U	6.02
Carbon Disulfide	U	5.00	U	6.02	U	5.75	U	6.02
Methyl-t-butyl Ether	U	5.00	2.23	6.02	U	5.75	U	6.02
trans-1,2-Dichloroethene	U	5.00	21.6	6.02	U	5.75	2.06	6.02
1,1-Dichloroethane	U	5.00	U	6.02	U	5.75	U	6.02
2-Butanone	U	5.00	U	6.02	U	5.75	8.70	6.02
2,2-Dichloropropane	U	5.00	438	30.1	7.66	5.75	U	6.02
cis-1,2-Dichloroethene	U	5.00	U	6.02	U	5.75	U	6.02
Chloroform	U	5.00	U	6.02	U	5.75	U	6.02
1,1-Dichloropropene	U	5.00	U	6.02	U	5.75	73.1	6.02
1,2-Dichloroethane	U	5.00	53.1	6.02	38.7	5.75	U	6.02
1,1,1-Trichloroethane	U	5.00	U	6.02	U	5.75	U	6.02
Carbon Tetrachloride	U	5.00	U	6.02	U	5.75	72.2	6.02
Benzene	U	5.00	273	30.1	19.8	5.75	U	6.02
Trichloroethene	U	5.00	U	6.02	U	5.75	U	6.02
1,2-Dichloropropane	U	5.00	U	6.02	U	5.75	U	6.02
Bromodichloromethane	U	5.00	U	6.02	U	5.75	U	6.02
Dibromomethane	U	5.00	U	6.02	U	5.75	U	6.02
cis-1,3-Dichloropropene	U	5.00	U	6.02	U	5.75	U	6.02
trans-1,3-Dichloropropene	U	5.00	U	6.02	U	5.75	U	6.02
1,1,2-Trichloroethane	U	5.00	U	6.02	U	5.75	U	6.02
1,3-Dichloropropane	U	5.00	U	6.02	U	5.75	U	6.02
Dibromochloromethane	U	5.00	U	6.02	U	5.75	U	6.02
1,2-Dibromoethane	U	5.00	U	6.02	U	5.75	U	6.02
Bromofom	U	5.00	U	6.02	U	5.75	1.71	6.02
4-Methyl-2-pentanone	U	5.00	3.05	6.02	U	5.75	U	6.02
Toluene	U	5.00	U	6.02	U	5.75	U	6.02
2-Hexanone	U	5.00	U	6.02	U	5.75	U	6.02
Tetrachloroethene	U	5.00	U	6.02	U	5.75	U	6.02
Chlorobenzene	U	5.00	U	6.02	U	5.75	U	6.02
1,1,1,2-Tetrachloroethane	U	5.00	U	6.02	U	5.75	U	12.0
Ethylbenzene	U	10.0	4.25	12.0	U	11.5	U	6.02
p&m-Xylene	U	5.00	U	6.02	U	5.75	U	6.02
o-Xylene	U	5.00	U	6.02	U	5.75	U	6.02
Styrene	U	5.00	U	6.02	U	5.75	U	6.02
Isopropylbenzene	U	5.00	U	6.02	U	5.75	U	6.02
1,1,2,2-Tetrachloroethane	U	5.00	U	6.02	U	5.75	U	6.02
1,2,3-Trichloropropane	U	5.00	U	6.02	U	5.75	U	6.02
n-Propylbenzene	U	5.00	U	6.02	U	5.75	U	6.02
Bromobenzene	U	5.00	U	6.02	U	5.75	U	6.02
1,3,5-Trimethylbenzene	U	5.00	U	6.02	U	5.75	U	6.02
2-Chlorotoluene	U	5.00	U	6.02	U	5.75	U	6.02
4-Chlorotoluene	U	5.00	U	6.02	U	5.75	U	6.02
tert-Butylbenzene	U	5.00	U	6.02	U	5.75	U	6.02
1,2,4-Trimethylbenzene	U	5.00	U	6.02	U	5.75	U	6.02
sec-Butylbenzene	U	5.00	U	6.02	U	5.75	U	6.02
p-Isopropyltoluene	U	5.00	U	6.02	U	5.75	U	6.02
1,3-Dichlorobenzene	U	5.00	1.65	6.02	U	5.75	U	6.02
1,4-Dichlorobenzene	U	5.00	U	6.02	U	5.75	U	6.02
n-Butylbenzene	U	5.00	12.7	6.02	U	5.75	U	6.02
1,2-Dichlorobenzene	U	5.00	U	6.02	U	5.75	U	6.02
1,2-Dibromo-3-chloropropane	U	5.00	U	6.02	U	5.75	U	6.02
1,2,4-Trichlorobenzene	U	5.00	U	6.02	U	5.75	U	6.02
Hexachlorobutadiene	U	5.00	U	6.02	U	5.75	U	6.02
Naphthalene	U	5.00	U	6.02	U	5.75	U	6.02
1,2,3-Trichlorobenzene	U	5.00	U	6.02	U	5.75	U	6.02

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No	Soil Blank B 082608-1		19162 SB-004-7 5'		19163 SB-004-10'		19164 SB-004 15'		19165 SB-004 20'	
Location	1		5		5		5		5	
Dilution Factor	100		87		84		81		82	
Percent Solids										
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	28.7	U	29.8	U	30.9	U	30.5
Chloromethane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Vinyl Chloride	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Bromomethane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Chloroethane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Trichlorofluoromethane	U	20.0	U	115	U	119	U	123	U	122
Acetone	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,1-Dichloroethene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Methylene Chloride	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Carbon Disulfide	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Methyl-t-butyl Ether	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
trans-1,2-Dichloroethene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,1-Dichloroethane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
2-Butanone	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
2,2-Dichloropropane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
cis-1,2-Dichloroethene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Chloroform	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,1-Dichloropropene	U	5.00	U	28.7	U	29.8	155	30.9	118	30.5
1,2-Dichloroethane	U	5.00	34.9	28.7	51.1	29.8	U	30.9	U	30.5
1,1,1-Trichloroethane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Carbon Tetrachloride	U	5.00	U	28.7	U	29.8	58.0	30.9	43.1	30.5
Benzene	U	5.00	14.7	28.7	18.5	29.8	U	30.9	U	30.5
Trichloroethene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,2-Dichloropropane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Bromodichloromethane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Dibromomethane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
cis-1,3-Dichloropropene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
trans-1,3-Dichloropropene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,1,2-Trichloroethane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,3-Dichloropropane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Dibromochloromethane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,2-Dibromoethane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Bromoform	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
4-Methyl-2-pentanone	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Toluene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
2-Hexanone	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Tetrachloroethene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Chlorobenzene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,1,1,2-Tetrachloroethane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Ethylbenzene	U	10.0	U	57.5	U	59.5	U	61.7	U	61.0
p&m-Xylene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
o-Xylene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Styrene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Isopropylbenzene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,1,2,2-Tetrachloroethane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,2,3-Trichloropropane	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
n-Propylbenzene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Bromobenzene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,3,5-Trimethylbenzene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
2-Chlorotoluene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
4-Chlorotoluene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
tert-Butylbenzene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,2,4-Trimethylbenzene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
sec-Butylbenzene	U	5.00	U	23.7	U	29.8	U	30.9	U	30.5
p-Isopropyltoluene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,3-Dichlorobenzene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,4-Dichlorobenzene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
n-Butylbenzene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,2-Dichlorobenzene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
1,2-Dibromo-3-chloropropane	U	5.00	U	23.7	U	29.8	U	30.9	U	30.5
1,2,4-Trichlorobenzene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Hexachlorobutadiene	U	5.00	U	28.7	U	29.8	U	30.9	U	30.5
Naphthalene	U	5.00	U	23.7	U	29.8	U	30.9	U	30.5
1,2,3-Trichlorobenzene	U	5.00	U	23.7	U	29.8	U	30.9	U	30.5

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

Method: REAC SOP 1807

Sample No Location Dilution Factor Percent Solids	Soil Blank B 082606-1		04181 SB-403-4.5'	
	1 100		5 95	
Analyte	Result µg/kg	RL µg/kg	Result µg/kg	RL µg/kg
Dichlorodifluoromethane	U	5.00	U	26.3
Chloromethane	U	5.00	U	26.3
Vinyl Chloride	U	5.00	U	26.3
Bromomethane	U	5.00	U	26.3
Chloroethane	U	5.00	U	26.3
Trichlorofluoromethane	U	5.00	U	105
Acetone	U	20.0	U	26.3
1,1-Dichloroethene	U	5.00	U	26.3
Methylene Chloride	U	5.00	U	26.3
Carbon Disulfide	U	5.00	U	26.3
Methyl-t-butyl Ether	U	5.00	U	26.3
trans-1,2-Dichloroethene	U	5.00	U	26.3
1,1-Dichloroethane	U	5.00	U	26.3
2-Butanone	U	5.00	U	26.3
2,2-Dichloropropane	U	5.00	13.9	26.3
cis-1,2-Dichloroethene	U	5.00	U	26.3
Chloroform	U	5.00	U	26.3
1,1-Dichloropropene	U	5.00	U	26.3
1,2-Dichloroethane	U	5.00	67.3	26.3
1,1,1-Trichloroethane	U	5.00	U	26.3
Carbon Tetrachloride	U	5.00	U	26.3
Benzene	U	5.00	114	26.3
Trichloroethene	U	5.00	U	26.3
1,2-Dichloropropane	U	5.00	U	26.3
Bromodichloromethane	U	5.00	U	26.3
Dibromomethane	U	5.00	U	26.3
cis-1,3-Dichloropropene	U	5.00	U	26.3
trans-1,3-Dichloropropene	U	5.00	U	26.3
1,1,2-Trichloroethane	U	5.00	U	26.3
1,3-Dichloropropane	U	5.00	U	26.3
Dibromochloromethane	U	5.00	U	26.3
1,2-Dibromoethane	U	5.00	U	26.3
Bromoform	U	5.00	U	26.3
4-Methyl-2-pentanone	U	5.00	U	26.3
Toluene	U	5.00	U	26.3
2-Hexanone	U	5.00	U	26.3
Tetrachloroethene	U	5.00	U	26.3
Chlorobenzene	U	5.00	U	26.3
1,1,1,2-Tetrachloroethane	U	5.00	U	26.3
Ethylbenzene	U	10.0	U	52.6
p&m-Xylene	U	5.00	U	26.3
o-Xylene	U	5.00	U	26.3
Styrene	U	5.00	U	26.3
Isopropylbenzene	U	5.00	U	26.3
1,1,2,2-Tetrachloroethane	U	5.00	U	26.3
1,2,3-Trichloropropane	U	5.00	U	26.3
n-Propylbenzene	U	5.00	U	26.3
Bromobenzene	U	5.00	U	26.3
1,3,5-Trimethylbenzene	U	5.00	U	26.3
2-Chlorotoluene	U	5.00	U	26.3
4-Chlorotoluene	U	5.00	U	26.3
tert-Butylbenzene	U	5.00	U	26.3
1,2,4-Trimethylbenzene	U	5.00	U	26.3
sec-Butylbenzene	U	5.00	U	26.3
p-Isopropyltoluene	U	5.00	U	26.3
1,3-Dichlorobenzene	U	5.00	U	26.3
1,4-Dichlorobenzene	U	5.00	U	26.3
n-Butylbenzene	U	5.00	U	26.3
1,2-Dichlorobenzene	U	5.00	U	26.3
1,2-Dibromo-3-chloropropane	U	5.00	U	26.3
1,2,4-Trichlorobenzene	U	5.00	U	26.3
Hexachlorobutadiene	U	5.00	U	26.3
Naphthalene	U	5.00	U	26.3
1,2,3-Trichlorobenzene	U	5.00	U	26.3

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No	Soil Blank B 082706-2		19169 SB005-4'		19168 SB005-23'		19170 SB006-4.5'		15135 SB007-4.5'	
Location	1		1		5		5		10	
Dilution Factor	100		83		86		77		75	
Percent Solids										
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	29.1	U	32.5	U	66.7
Chloromethane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Vinyl Chloride	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Bromomethane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Chloroethane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Trichlorofluoromethane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Acetone	U	20.0	24.3	24.1	U	116	130	130	140	J
1,1-Dichloroethene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Methylene Chloride	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Carbon Disulfide	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Methyl-t-butyl Ether	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
trans-1,2-Dichloroethene	U	5.00	U	6.02	U	29.1	U	32.5	41.2	J
1,1-Dichloroethane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
2-Butanone	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
2,2-Dichloropropane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
cis-1,2-Dichloroethene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Chloroform	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,1-Dichloropropene	U	5.00	U	6.02	U	29.1	U	32.5	527	66.7
1,2-Dichloroethane	U	5.00	162	6.02	179	29.1	545	32.5	U	66.7
1,1,1-Trichloroethane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Carbon Tetrachloride	U	5.00	U	6.02	U	29.1	U	32.5	287	66.7
Benzene	U	5.00	96.6	6.02	70.2	29.1	279	32.5	U	66.7
Trichloroethene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,2-Dichloropropane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Bromodichloromethane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Dibromomethane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
cis-1,3-Dichloropropene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
trans-1,3-Dichloropropene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,1,2-Trichloroethane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,3-Dichloropropane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Dibromochloromethane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,2-Dibromoethane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Bromoform	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
4-Methyl-2-pentanone	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Toluene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
2-Hexanone	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Tetrachloroethene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Chlorobenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,1,1,2-Tetrachloroethane	U	5.00	U	6.02	U	29.1	U	64.9	U	133
Ethylbenzene	U	10.0	U	12.0	U	58.1	U	32.5	U	66.7
p&m-Xylene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
o-Xylene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Styrene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Isopropylbenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,1,2,2-Tetrachloroethane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,2,3-Trichloropropane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
n-Propylbenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Bromobenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,3,5-Trimethylbenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
2-Chlorotoluene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
4-Chlorotoluene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
tert-Butylbenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,2,4-Trimethylbenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
sec-Butylbenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
p-Isopropyltoluene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,3-Dichlorobenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,4-Dichlorobenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
n-Butylbenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,2-Dichlorobenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,2-Dibromo-3-chloropropane	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,2,4-Trichlorobenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Hexachlorobutadiene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
Naphthalene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7
1,2,3-Trichlorobenzene	U	5.00	U	6.02	U	29.1	U	32.5	U	66.7

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 /etal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Method: REAC SOP 1807		Soil Blank B 082706-2		15137 SB008-5'		15138 SB008-7.5'		23733 SB-009-18'		23734 SB-009-24.5'	
Sample No											
Location											
Dilution Factor	1		10		5		5		5		93
Percent Solids	100		10		85		84				
	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	Result
Analyte	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
Dichlorodifluoromethane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Chloromethane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Vinyl Chloride	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Bromomethane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Chloroethane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	108
Trichlorofluoromethane	U	5.00	U	61.7	U	118	U	119	U	119	26.9
Acetone	U	20.0	120	J	247	U	29.4	278	29.8	34.3	26.9
1,1-Dichloroethene	U	5.00	65.2	U	61.7	U	29.4	2520	298	U	26.9
Methylene Chloride	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Carbon Disulfide	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Methyl-t-butyl Ether	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
trans-1,2-Dichloroethene	U	5.00	36.2	J	61.7	U	29.4	100	29.8	20.7	J
1,1-Dichloroethane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
2-Butanone	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
2,2-Dichloropropane	U	5.00	19.9	J	61.7	U	29.4	53.7	29.8	U	26.9
cis-1,2-Dichloroethene	U	5.00	U	61.7	U	29.4	U	69.6	29.8	U	26.9
Chloroform	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
1,1-Dichloropropene	U	5.00	U	61.7	U	29.4	U	76.5	29.8	U	26.9
1,2-Dichloroethane	U	5.00	579	U	61.7	719	29.4	580000	59500	952	53.8
1,1,1-Trichloroethane	U	5.00	U	61.7	U	29.4	U	88.8	29.8	U	26.9
Carbon Tetrachloride	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Benzene	U	5.00	406	U	61.7	313	29.4	149000	59500	198	53.8
Trichloroethene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
1,2-Dichloropropane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Bromodichloromethane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Dibromomethane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
cis-1,3-Dichloropropene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
trans-1,3-Dichloropropene	U	5.00	U	61.7	U	29.4	U	312	29.8	U	26.9
1,1,2-Trichloroethane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
1,3-Dichloropropane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Dibromochloromethane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
1,2-Dibromoethane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Bromoform	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
4-Methyl-2-pentanone	U	5.00	U	61.7	U	29.4	U	186	29.8	U	26.9
Toluene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
2-Hexanone	U	5.00	U	61.7	U	29.4	U	35.2	29.8	U	26.9
Tetrachloroethene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Chlorobenzene	U	5.00	U	61.7	U	29.4	U	13.9	J	29.8	26.9
1,1,1,2-Tetrachloroethane	U	5.00	U	61.7	U	29.4	U	11.9	J	29.8	26.9
Ethylbenzene	U	10.0	U	123	U	58.8	U	50.9	J	59.5	53.8
p&m-Xylene	U	5.00	U	61.7	U	29.4	U	11.4	J	29.8	26.9
o-Xylene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Styrene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Isopropylbenzene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
1,1,2,2-Tetrachloroethane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
1,2,3-Trichloropropane	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
n-Propylbenzene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Bromobenzene	U	5.00	U	61.7	U	29.4	U	406	298	U	26.9
1,3,5-Trimethylbenzene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
2-Chlorotoluene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
4-Chlorotoluene	U	5.00	J	61.7	U	29.4	U	29.8	U	29.8	26.9
tert-Butylbenzene	U	5.00	J	61.7	U	29.4	U	14.6	J	29.8	26.9
1,2,4-Trimethylbenzene	U	5.00	J	61.7	U	29.4	U	29.8	U	29.8	26.9
sec-Butylbenzene	U	5.00	J	61.7	U	29.4	U	29.8	U	29.8	26.9
p-Isopropyltoluene	U	5.00	J	61.7	U	29.4	U	29.8	U	29.8	26.9
1,3-Dichlorobenzene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
1,4-Dichlorobenzene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
n-Butylbenzene	U	5.00	U	61.7	U	29.4	U	11.5	J	29.8	26.9
1,2-Dichlorobenzene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
1,2-Dibromo-3-chloropropane	U	5.00	U	61.7	U	29.4	U	7.56	J	29.8	26.9
1,2,4-Trichlorobenzene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
Hexachlorocycladiene	U	5.00	U	61.7	U	29.4	U	221	J	29.8	26.9
Naphthalene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9
1,2,3-Trichlorobenzene	U	5.00	U	61.7	U	29.4	U	29.8	U	29.8	26.9

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No	Soil Blank B 082706-2		23736 SB-009-28.5'		23879 SB014-17.5'		23870 SB011-12.5'		23876 SB012-20'	
Location										
Dilution Factor	1		5		5		5		5	
Percent Solids	100		90		82		82		88	
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	27.8	U	30.5	U	30.5	U	28.4
Chloromethane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Vinyl Chloride	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Bromomethane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Chloroethane	U	5.00	U	27.8	U	30.5	U	122	U	114
Trichlorofluoromethane	U	20.0	U	111	U	122	U	30.5	U	28.4
Acetone	U	5.00	17.4	27.8	U	30.5	U	30.5	U	28.4
1,1-Dichloroethene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Methylene Chloride	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Carbon Disulfide	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Methyl-t-butyl Ether	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
trans-1,2-Dichloroethene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,1-Dichloroethane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
2-Butanone	U	5.00	U	27.8	U	30.5	U	30.5	15.6	28.4
2,2-Dichloropropane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
cis-1,2-Dichloroethene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Chloroform	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,1-Dichloropropene	U	5.00	U	27.8	U	30.5	132	30.5	287	28.4
1,2-Dichloroethane	U	5.00	345	27.8	6620	610	U	30.5	U	28.4
1,1,1-Trichloroethane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Carbon Tetrachloride	U	5.00	U	27.8	U	30.5	155	30.5	358	28.4
Benzene	U	5.00	75.4	27.8	2360	610	U	30.5	U	28.4
Trichloroethene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,2-Dichloropropane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Bromodichloromethane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Dibromomethane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
cis-1,3-Dichloropropene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
trans-1,3-Dichloropropene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,1,2-Trichloroethane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,3-Dichloropropane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Dibromochloromethane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,2-Dibromoethane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Bromoform	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
4-Methyl-2-pentanone	U	5.00	U	27.8	31.8	30.5	U	30.5	U	28.4
Toluene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
2-Hexanone	U	5.00	U	27.8	21.5	J	30.5	U	30.5	28.4
Tetrachloroethene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Chlorobenzene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,1,1,2-Tetrachloroethane	U	5.00	U	27.8	13.3	J	61.0	U	61.0	56.8
Ethylbenzene	U	10.0	U	55.6	42.7	J	30.5	U	30.5	28.4
p&m-Xylene	U	5.00	U	27.8	12.9	J	30.5	U	30.5	28.4
o-Xylene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Styrene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Isopropylbenzene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,1,2,2-Tetrachloroethane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,2,3-Trichloropropane	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
n-Propylbenzene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Bromobenzene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,3,5-Trimethylbenzene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
2-Chlorotoluene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
4-Chlorotoluene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
tert-Butylbenzene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,2,4-Trimethylbenzene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
sec-Butylbenzene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
p-isopropyltoluene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,3-Dichlorobenzene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,4-Dichlorobenzene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
n-Butylbenzene	U	5.00	U	27.8	35.7	U	30.5	U	30.5	28.4
1,2-Dichlorobenzene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
1,2-Dibromo-3-chloropropane	U	5.00	U	27.8	58.0	J	30.5	U	30.5	28.4
1,2,4-Trichlorobenzene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4
Hexachlorobutadiene	U	5.00	U	27.8	34.4	J	30.5	U	30.5	28.4
Naphthalene	U	5.00	U	27.8	10.5	J	30.5	U	30.5	28.4
1,2,3-Trichlorobenzene	U	5.00	U	27.8	U	30.5	U	30.5	U	28.4

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No	Soil Blank B 082706-3		15161 SB-004-5'		04197 SB005-10'		23875 SB012-18'		23877 SB011-19'	
Location	1		0		5		5		5	
Dilution Factor	100		40		84		84		84	
Percent Solids										
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	55.6	U	29.8	U	29.8	U	29.8
Chloromethane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Vinyl Chloride	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Bromomethane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Chloroethane	U	5.00	U	55.6	U	29.8	U	29.8	U	119
Trichlorofluoromethane	U	5.00	U	222	U	119	U	119	U	119
Acetone	7.52	20.0	J	222	U	29.8	U	29.8	74.5	29.8
1,1-Dichloroethene	U	5.00	114	55.6	U	29.8	U	29.8	79.3	29.8
Methylene Chloride	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Carbon Disulfide	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Methyl-t-butyl Ether	U	5.00	U	55.6	U	29.8	U	29.8	14.1	J
trans-1,2-Dichloroethene	U	5.00	21.7	J	55.6	U	29.8	U	U	29.8
1,1-Dichloroethane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
2-Butanone	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
2,2-Dichloropropane	U	5.00	305	55.6	U	29.8	U	29.8	U	29.8
cis-1,2-Dichloroethene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Chloroform	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,1-Dichloropropene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,2-Dichloroethane	U	5.00	376	55.6	33.5	29.8	281	29.8	2000	595
1,1,1-Trichloroethane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Carbon Tetrachloride	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Benzene	U	5.00	1010	55.6	13.4	J	29.8	1520	298	1040
Trichloroethene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,2-Dichloropropane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Bromodichloromethane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Dibromomethane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
cis-1,3-Dichloropropene	U	5.00	U	55.6	U	29.8	U	29.8	12.7	J
trans-1,3-Dichloropropene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,1,2-Trichloroethane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,3-Dichloropropane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Dibromochloromethane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,2-Dibromoethane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Bromoform	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
4-Methyl-2-pentanone	U	5.00	17.1	J	55.6	U	29.8	U	29.8	29.8
Toluene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
2-Hexanone	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Tetrachloroethene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Chlorobenzene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,1,1,2-Tetrachloroethane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Ethylbenzene	U	10.0	U	111	U	59.5	U	59.5	U	59.5
p&m-Xylene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
o-Xylene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Styrene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Isopropylbenzene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,1,2,2-Tetrachloroethane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,2,3-Trichloropropane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
n-Propylbenzene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Bromobenzene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,3,5-Trimethylbenzene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
2-Chlorotoluene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
4-Chlorotoluene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
tert-Butylbenzene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,2,4-Trimethylbenzene	U	5.00	J	55.6	U	29.8	U	29.8	U	29.8
sec-Butylbenzene	U	5.00	J	55.6	U	29.8	U	29.8	U	29.8
p-Isopropyltoluene	U	5.00	J	55.6	U	29.8	U	29.8	U	29.8
1,3-Dichlorobenzene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,4-Dichlorobenzene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
n-Butylbenzene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,2-Dichlorobenzene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,2-Dibromo-3-chloropropane	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,2,4-Trichlorobenzene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Hexachlorobutadiene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
Naphthalene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8
1,2,3-Trichlorobenzene	U	5.00	U	55.6	U	29.8	U	29.8	U	29.8

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No	Soil Blank B 082706-3		23739 SB012-9'		23873 SB010-18.5'		23737 SB010-22'		23738 SB010-8.5'	
Location	1		5		5		5		5	
Dilution Factor	100		83		70		80		82	
Percent Solids										
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	30.1	U	35.7	U	31.3	U	30.5
Chloromethane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Vinyl Chloride	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Bromomethane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Chloroethane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Trichlorofluoromethane	U	5.00	U	120	U	143	U	125	U	122
Acetone	7.52	J	U	30.1	244	35.7	138	31.3	U	30.5
1,1-Dichloroethene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Methylene Chloride	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Carbon Disulfide	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Methyl-t-butyl Ether	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
trans-1,2-Dichloroethene	U	5.00	U	30.1	40.3	35.7	24.1	J	31.3	U
1,1-Dichloroethane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
2-Butanone	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
2,2-Dichloropropane	U	5.00	U	30.1	11.0	J	35.7	U	31.3	U
cis-1,2-Dichloroethene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Chloroform	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,1-Dichloropropene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,2-Dichloroethane	U	5.00	318	30.1	3910	714	3410	313	110	30.5
1,1,1-Trichloroethane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Carbon Tetrachloride	U	5.00	U	30.1	U	35.7	U	31.3	33.7	30.5
Benzene	U	5.00	1070	30.1	108	35.7	38.4	31.3	U	30.5
Trichloroethene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,2-Dichloropropane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Bromodichloromethane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Dibromomethane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
cis-1,3-Dichloropropene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
trans-1,3-Dichloropropene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,1,2-Trichloroethane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,3-Dichloropropane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Dibromochloromethane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,2-Dibromoethane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Bromoform	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
4-Methyl-2-pentanone	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Toluene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
2-Hexanone	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Tetrachloroethene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Chlorobenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,1,1,2-Tetrachloroethane	U	5.00	U	30.1	U	35.7	U	62.5	U	61.0
Ethylbenzene	U	10.0	U	60.2	U	71.4	U	31.3	U	30.5
p&m-Xylene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
o-Xylene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Styrene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Isopropylbenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,1,2,2-Tetrachloroethane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,2,3-Trichloropropane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
n-Propylbenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Bromobenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,3,5-Trimethylbenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
2-Chlorotoluene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
4-Chlorotoluene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
tert-Butylbenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,2,4-Trimethylbenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
sec-Butylbenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
p-Isopropyltoluene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,3-Dichlorobenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,4-Dichlorobenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
n-Butylbenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,2-Dichlorobenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,2-Dibromo-3-chloropropane	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,2,4-Trichlorobenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Hexachlorobutadiene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
Naphthalene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5
1,2,3-Trichlorobenzene	U	5.00	U	30.1	U	35.7	U	31.3	U	30.5

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vernal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No	Soil Blank B 082706-3		23882 SB012a-23'		23883 SB016-18'		23878 SB012a-6'		23881 SB012a-16'	
Location	1		5		5		5		5	
Dilution Factor	100		81		82		85		85	
Percent Solids										
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	30.5	U	30.5	U	29.4	U	29.4
Chloromethane	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Vinyl Chloride	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Bromomethane	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Chloroethane	U	5.00	99.0	30.5	U	30.5	U	29.4	720	J 29.4
Trichlorofluoromethane	U	5.00	122	U	122	U	118	236	J 118	29.4
Acetone	7.52	J 20.0	U	30.5	U	30.5	U	29.4	5820	J 29.4
1,1-Dichloroethene	U	5.00	3750	J 30.5	U	30.5	U	29.4	U	29.4
Methylene Chloride	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Carbon Disulfide	U	5.00	U	30.5	U	30.5	U	29.4	8.35	J 29.4
Methyl-t-butyl Ether	U	5.00	U	30.5	U	30.5	9.12	J 29.4	134	J 29.4
trans-1,2-Dichloroethene	U	5.00	41.4	30.5	U	30.5	U	29.4	U	29.4
1,1-Dichloroethane	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
2-Butanone	U	5.00	U	30.5	U	30.5	924	29.4	1370	J 29.4
2,2-Dichloropropane	U	5.00	53.2	30.5	U	30.5	U	29.4	U	29.4
cis-1,2-Dichloroethene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Chloroform	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
1,1-Dichloropropene	U	5.00	U	30.5	U	30.5	1030	29.4	83600	58800
1,2-Dichloroethane	U	5.00	10400	J 30.5	121	30.5	604	29.4	604	J 29.4
1,1,1-Trichloroethane	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Carbon Tetrachloride	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Benzene	U	5.00	5610	J 30.5	163	30.5	1720	294	108000	58800
Trichloroethene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
1,2-Dichloropropane	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Bromodichloromethane	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Dibromomethane	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
cis-1,3-Dichloropropene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
trans-1,3-Dichloropropene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
1,1,2-Trichloroethane	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
1,3-Dichloropropane	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Dibromochloromethane	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
1,2-Dibromoethane	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Bromoform	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
4-Methyl-2-pentanone	U	5.00	361	30.5	U	30.5	8.35	J 29.4	18000	J 29.4
Toluene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
2-Hexanone	U	5.00	U	30.5	U	30.5	U	29.4	492	J 29.4
Tetrachloroethene	U	5.00	U	30.5	U	30.5	U	29.4	38.0	J 29.4
Chlorobenzene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
1,1,1,2-Tetrachloroethane	U	5.00	U	30.5	U	30.5	U	29.4	3400	294
Ethylbenzene	U	10.0	19.9	J 61.0	U	61.0	U	58.8	15500	294
p&m-Xylene	U	5.00	U	30.5	U	30.5	U	29.4	3480	294
o-Xylene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Styrene	U	5.00	U	30.5	U	30.5	U	29.4	309	J 29.4
Isopropylbenzene	U	5.00	U	30.5	U	30.5	U	29.4	93.0	J 29.4
1,1,2,2-Tetrachloroethane	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
1,2,3-Trichloropropane	U	5.00	U	30.5	U	30.5	U	29.4	316	J 29.4
n-Propylbenzene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Bromobenzene	U	5.00	U	30.5	U	30.5	U	29.4	558	J 29.4
1,3,5-Trimethylbenzene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
2-Chlorotoluene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
4-Chlorotoluene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
tert-Butylbenzene	U	5.00	U	30.5	U	30.5	U	29.4	1550	294
1,2,4-Trimethylbenzene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
sec-Butylbenzene	U	5.00	U	30.5	U	30.5	U	29.4	266	J 29.4
p-Isopropyltoluene	U	5.00	U	30.5	U	30.5	U	29.4	25.5	J 29.4
1,3-Dichlorobenzene	U	5.00	9.11	J 30.5	U	30.5	U	29.4	337	J 29.4
1,4-Dichlorobenzene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
n-Butylbenzene	U	5.00	53.0	30.5	U	30.5	U	29.4	1150	294
1,2-Dichlorobenzene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
1,2-Dibromo-3-chloropropane	U	5.00	U	30.5	U	30.5	U	29.4	111	J 29.4
1,2,4-Trichlorobenzene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
Hexachlorobutadiene	U	5.00	U	30.5	U	30.5	U	29.4	122	J 29.4
Naphthalene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4
1,2,3-Trichlorobenzene	U	5.00	U	30.5	U	30.5	U	29.4	U	29.4

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No Location Dilution Factor Percent Solids	Soil Blank B 082706-3		23880 SB013-9	
	1 100		5 84	
Analyte	Result µg/kg	RL µg/kg	Result µg/kg	RL µg/kg
Dichlorodifluoromethane	U	5.00	U	29.8
Chloromethane	U	5.00	U	29.8
Vinyl Chloride	U	5.00	U	29.8
Bromomethane	U	5.00	U	29.8
Chloroethane	U	5.00	U	29.8
Trichlorofluoromethane	U	5.00	U	29.8
Acetone	7.52	20.0	84.2	119
1,1-Dichloroethene	U	5.00	U	29.8
Methylene Chloride	U	5.00	U	29.8
Carbon Disulfide	U	5.00	U	29.8
Methyl-t-butyl Ether	U	5.00	U	29.8
trans-1,2-Dichloroethene	U	5.00	U	29.8
1,1-Dichloroethane	U	5.00	U	29.8
2-Butanone	U	5.00	U	29.8
2,2-Dichloropropane	U	5.00	U	29.8
cis-1,2-Dichloroethene	U	5.00	U	29.8
Chloroform	U	5.00	U	29.8
1,1-Dichloropropene	U	5.00	U	29.8
1,2-Dichloroethane	U	5.00	66.5	J 29.8
1,1,1-Trichloroethane	U	5.00	U	29.8
Carbon Tetrachloride	U	5.00	U	29.8
Benzene	U	5.00	161	J 29.8
Trichloroethene	U	5.00	U	29.8
1,2-Dichloropropane	U	5.00	U	29.8
Bromodichloromethane	U	5.00	U	29.8
Dibromomethane	U	5.00	U	29.8
cis-1,3-Dichloropropene	U	5.00	U	29.8
trans-1,3-Dichloropropene	U	5.00	U	29.8
1,1,2-Trichloroethane	U	5.00	U	29.8
1,3-Dichloropropane	U	5.00	U	29.8
Dibromochloromethane	U	5.00	U	29.8
1,2-Dibromoethane	U	5.00	U	29.8
Bromoform	U	5.00	U	29.8
4-Methyl-2-pentanone	U	5.00	23.5	J 29.8
Toluene	U	5.00	U	29.8
2-Hexanone	U	5.00	U	29.8
Tetrachloroethene	U	5.00	U	29.8
Chlorobenzene	U	5.00	U	29.8
1,1,1,2-Tetrachloroethane	U	5.00	U	29.8
Ethylbenzene	U	10.0	21.0	J 59.5
p&m-Xylene	U	5.00	8.69	J 29.8
o-Xylene	U	5.00	U	29.8
Styrene	U	5.00	U	29.8
Isopropylbenzene	U	5.00	U	29.8
1,1,2,2-Tetrachloroethane	U	5.00	U	29.8
1,2,3-Trichloropropane	U	5.00	U	29.8
n-Propylbenzene	U	5.00	U	29.8
Bromobenzene	U	5.00	U	29.8
1,3,5-Trimethylbenzene	U	5.00	U	29.8
2-Chlorotoluene	U	5.00	U	29.8
4-Chlorotoluene	U	5.00	U	29.8
tert-Butylbenzene	U	5.00	U	29.8
1,2,4-Trimethylbenzene	U	5.00	U	29.8
sec-Butylbenzene	U	5.00	U	29.8
p-Isopropyltoluene	U	5.00	U	29.8
1,3-Dichlorobenzene	U	5.00	U	29.8
1,4-Dichlorobenzene	U	5.00	U	29.8
n-Butylbenzene	U	5.00	U	29.8
1,2-Dichlorobenzene	U	5.00	U	29.8
1,2-Dibromo-3-chloropropane	U	5.00	U	29.8
1,2,4-Trichlorobenzene	U	5.00	U	29.8
Hexachlorobutadiene	U	5.00	U	29.8
Naphthalene	U	5.00	U	29.8
1,2,3-Trichlorobenzene	U	5.00	U	29.8

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No	Soil Blank B 082806-2		00398 SB021-15A		00394 SB021-13		00393 SB021-15	
Location	1		5		5		5	
Dilution Factor	100		50		82		82	
Percent Solids								
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
Dichlorodifluoromethane	U	5.00	U	27.8	U	30.5	U	30.5
Chloromethane	U	5.00	U	27.8	U	30.5	U	30.5
Vinyl Chloride	U	5.00	U	27.8	U	30.5	U	30.5
Bromomethane	U	5.00	U	27.8	U	30.5	U	30.5
Chloroethane	U	5.00	U	27.8	U	30.5	U	30.5
Trichlorofluoromethane	U	20.0	U	111	43.8	J	122	J
Acetone	U	5.00	10.8	J	27.8	10.5	J	30.5
1,1-Dichloroethene	U	5.00	U	27.8	U	30.5	14.8	J
Methylene Chloride	U	5.00	U	27.8	U	30.5	11.0	J
Carbon Disulfide	U	5.00	U	27.8	U	30.5	U	30.5
Methyl-t-butyl Ether	U	5.00	U	27.8	U	30.5	U	30.5
trans-1,2-Dichloroethene	U	5.00	U	27.8	U	30.5	U	30.5
1,1-Dichloroethane	U	5.00	U	27.8	U	30.5	U	30.5
2-Butanone	U	5.00	U	27.8	U	30.5	U	30.5
2,2-Dichloropropane	U	5.00	U	27.8	U	30.5	U	30.5
cis-1,2-Dichloroethene	U	5.00	U	27.8	U	30.5	U	30.5
Chloroform	U	5.00	U	27.8	U	30.5	U	30.5
1,1-Dichloropropene	U	5.00	U	27.8	U	30.5	U	30.5
1,2-Dichloroethane	U	5.00	804	J	27.8	1170	30.5	2890
1,1,1-Trichloroethane	U	5.00	U	27.8	U	30.5	U	J
Carbon Tetrachloride	U	5.00	U	27.8	U	30.5	U	30.5
Benzene	U	5.00	971	J	27.8	1700	J	305
Trichloroethene	U	5.00	U	27.8	U	30.5	4950	J
1,2-Dichloropropane	U	5.00	U	27.8	U	30.5	U	30.5
Bromodichloromethane	U	5.00	U	27.8	U	30.5	U	30.5
Dibromomethane	U	5.00	U	27.8	U	30.5	U	30.5
cis-1,3-Dichloropropene	U	5.00	U	27.8	U	30.5	U	30.5
trans-1,3-Dichloropropene	U	5.00	U	27.8	U	30.5	11.1	J
1,1,2-Trichloroethane	U	5.00	U	27.8	U	30.5	U	30.5
1,3-Dichloropropane	U	5.00	U	27.8	U	30.5	U	30.5
Dibromochloromethane	U	5.00	U	27.8	U	30.5	U	30.5
1,2-Dibromoethane	U	5.00	U	27.8	U	30.5	U	30.5
Bromoform	U	5.00	U	27.8	U	30.5	U	30.5
4-Methyl-2-pentanone	U	5.00	U	27.8	10.4	J	30.5	56.9
Toluene	U	5.00	U	27.8	U	30.5	U	30.5
2-Hexanone	U	5.00	U	27.8	U	30.5	U	30.5
Tetrachloroethene	U	5.00	U	27.8	U	30.5	U	30.5
Chlorobenzene	U	5.00	U	27.8	U	30.5	U	30.5
1,1,1,2-Tetrachloroethane	U	5.00	U	27.8	U	30.5	7.93	J
Ethylbenzene	U	5.00	U	55.6	U	61.0	44.2	J
p-m-Xylene	U	10.0	U	27.8	U	30.5	12.4	J
o-Xylene	U	5.00	U	27.8	U	30.5	U	30.5
Styrene	U	5.00	U	27.8	U	30.5	U	30.5
Isopropylbenzene	U	5.00	U	27.8	U	30.5	U	30.5
1,1,2,2-Tetrachloroethane	U	5.00	U	27.8	U	30.5	U	30.5
1,2,3-Trichloropropane	U	5.00	U	27.8	U	30.5	U	30.5
n-Propylbenzene	U	5.00	U	27.8	U	30.5	U	30.5
Bromobenzene	U	5.00	U	27.8	U	30.5	U	30.5
1,3,5-Trimethylbenzene	U	5.00	U	27.8	U	30.5	U	30.5
2-Chlorotoluene	U	5.00	U	27.8	U	30.5	U	30.5
4-Chlorotoluene	U	5.00	U	27.8	U	30.5	U	30.5
tert-Butylbenzene	U	5.00	U	27.8	U	30.5	U	30.5
1,2,4-Trimethylbenzene	U	5.00	U	27.8	U	30.5	U	30.5
sec-Butylbenzene	U	5.00	U	27.8	U	30.5	U	30.5
p-Isopropyltoluene	U	5.00	J	27.8	U	30.5	U	30.5
1,3-Dichlorobenzene	U	5.00	J	27.8	U	30.5	U	30.5
1,4-Dichlorobenzene	U	5.00	J	27.8	U	30.5	U	30.5
n-Butylbenzene	U	5.00	8.44	J	27.8	24.5	J	30.5
1,2-Dichlorobenzene	U	5.00	U	27.8	U	30.5	56.0	J
1,2-Dibromo-3-chloropropane	U	5.00	U	27.8	13.2	J	U	30.5
1,2,4-Trichlorobenzene	U	5.00	U	27.8	U	30.5	U	30.5
Hexachlorobutadiene	U	5.00	U	27.8	17.1	J	52.7	J
Naphthalene	U	5.00	U	27.8	U	30.5	U	30.5
1,2,3-Trichlorobenzene	U	5.00	U	27.8	U	30.5	U	30.5

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Method: REAC SOP 1807	Soil Blank B 082806-2		23888		00392		00624		00396		
Sample No	SB019-17.5		SB026-15'		SB022-4.5		SB022-11.5				
Location	5		5		5		5		5		
Dilution Factor	1		80		83		86		81		
Percent Solids	100										
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	31.3	U	30.1	U	29.1	U	30.9	
Chloromethane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Vinyl Chloride	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Bromomethane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Chloroethane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Trichlorofluoromethane	U	5.00	U	125	U	120	U	116	62.4	J	123
Acetone	U	20.0	U	125	U	120	U	116	20.5	J	30.9
1,1-Dichloroethene	U	5.00	U	31.3	7.65	J	30.1	U	98.0	J	30.9
Methylene Chloride	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Carbon Disulfide	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Methyl-t-butyl Ether	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
trans-1,2-Dichloroethene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
1,1-Dichloroethane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
2-Butanone	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
2,2-Dichloropropane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
cis-1,2-Dichloroethene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Chloroform	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
1,1-Dichloropropene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
1,2-Dichloroethane	U	5.00	294	31.3	739	30.1	49.0	29.1	55500	J	617
1,1,1-Trichloroethane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Carbon Tetrachloride	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Benzene	U	5.00	81.8	31.3	851	30.1	36.3	29.1	20500	617	
Trichloroethene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
1,2-Dichloropropane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Bromodichloromethane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Dibromomethane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
cis-1,3-Dichloropropene	U	5.00	U	31.3	U	30.1	U	29.1	147	J	30.9
trans-1,3-Dichloropropene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
1,1,2-Trichloroethane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
1,3-Dichloropropane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Dibromochloromethane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
1,2-Dibromoethane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Bromoform	U	5.00	U	31.3	U	30.1	U	29.1	49.9	J	30.9
4-Methyl-2-pentanone	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Toluene	U	5.00	U	31.3	U	30.1	U	29.1	32.3	J	30.9
2-Hexanone	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Tetrachloroethene	U	5.00	U	31.3	U	30.1	U	29.1	10.0	J	30.9
Chlorobenzene	U	5.00	U	31.3	U	30.1	U	29.1	25.4	J	30.9
1,1,1,2-Tetrachloroethane	U	5.00	U	31.3	U	30.1	U	58.1	141	J	617
Ethylbenzene	U	10.0	U	62.5	U	60.2	U	29.1	56.2	J	30.9
p&m-Xylene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
o-Xylene	U	5.00	U	31.3	U	30.1	U	29.1	9.01	J	30.9
Styrene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
Isopropylbenzene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
1,1,2,2-Tetrachloromethane	U	5.00	U	31.3	U	30.1	U	29.1	36.4	J	30.9
1,2,3-Trichloropropane	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
n-Propylbenzene	U	5.00	U	31.3	U	30.1	U	29.1	54.3	J	30.9
Bromobenzene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
1,3,5-Trimethylbenzene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
2-Chlorotoluene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
4-Chlorotoluene	U	5.00	U	31.3	U	30.1	U	29.1	299	J	30.9
tert-Butylbenzene	U	5.00	U	31.3	U	30.1	U	29.1	8.27	J	30.9
1,2,4-Trimethylbenzene	U	5.00	U	31.3	U	30.1	U	29.1	14.5	J	30.9
sec-Butylbenzene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
p-Isopropyltoluene	U	5.00	U	31.3	U	30.1	U	29.1	32.3	J	30.9
1,3-Dichlorobenzene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
1,4-Dichlorobenzene	U	5.00	U	31.3	U	30.1	U	29.1	221	J	30.9
n-Butylbenzene	U	5.00	U	31.3	8.25	J	30.1	U	29.1	U	30.9
1,2-Dichlorobenzene	U	5.00	U	31.3	U	30.1	U	29.1	650	J	30.9
1,2-Dibromo-3-chloropropane	U	5.00	U	31.3	19.8	J	30.1	U	29.1	U	30.9
1,2,4-Trichlorobenzene	U	5.00	U	31.3	U	30.1	U	29.1	2320	617	
Hexachlorobutadiene	U	5.00	U	31.3	U	30.1	U	29.1	239	J	30.9
Naphthalene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	
1,2,3-Trichlorobenzene	U	5.00	U	31.3	U	30.1	U	29.1	U	30.9	

rx\_2042

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

Method: REAC SOP 1807

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Sample No  
Location  
Dilution Factor  
Percent Solids

Soil Blank B 082#06-2  
1  
100

00399  
SB022-13.5  
5  
84

Analyte	Result µg/kg	RL µg/kg	Result µg/kg	RL µg/kg
Dichlorodifluoromethane	U	500	U	29.8
Chloromethane	U	500	U	29.8
Vinyl Chloride	U	500	U	29.8
Bromomethane	U	500	U	29.8
Chloroethane	U	500	U	29.8
Trichlorofluoromethane	U	500	U	29.8
Acetone	U	200	43 J	119
1,1-Dichloroethene	U	500	97700 J	29.8
Methylene Chloride	U	500	10100	2980
Carbon Disulfide	U	500	U	29.8
Methyl-t-butyl Ether	U	500	U	29.8
trans-1,2-Dichloroethene	U	500	U	29.8
1,1-Dichloroethane	U	500	987	29.8
2-Butanone	U	500	U	29.8
2,2-Dichloropropane	U	500	U	29.8
cis-1,2-Dichloroethene	U	500	1050	29.8
Chloroform	U	500	1230 J	29.8
1,1-Dichloropropene	U	500	U	29.8
1,2-Dichloroethane	U	500	U	29.8
1,1,1-Trichloroethane	U	500	200000	59500
Carbon Tetrachloride	U	500	U	29.8
Benzene	U	500	155	29.8
Trichloroethene	U	500	107000	2980
1,2-Dichloropropane	U	500	U	29.8
Bromodichloromethane	U	500	U	29.8
Dibromomethane	U	500	U	29.8
cis-1,3-Dichloropropene	U	500	U	29.8
trans-1,3-Dichloropropene	U	500	U	29.8
1,1,2-Trichloroethane	U	500	10900 J	29.8
1,3-Dichloropropane	U	500	U	29.8
Dibromochloromethane	U	500	U	29.8
1,2-Dibromoethane	U	500	U	29.8
Bromoform	U	500	U	29.8
4-Methyl-2-pentanone	U	500	128	29.8
Toluene	U	500	6210 J	29.8
2-Hexanone	U	500	U	29.8
Tetrachloroethene	U	500	3340 J	29.8
Chlorobenzene	U	500	49.5	29.8
1,1,1,2-Tetrachloroethane	U	500	897	29.8
Ethylbenzene	U	500	1210 J	29.8
p,m-Xylene	U	100	4210 J	59.5
o-Xylene	U	500	1450	29.8
Styrene	U	500	U	29.8
Isopropylbenzene	U	500	230	29.8
1,1,2,2-Tetrachloroethane	U	500	205	29.8
1,2,3-Trichloropropane	U	500	U	29.8
n-Propylbenzene	U	500	458	29.8
Bromobenzene	U	500	U	29.8
1,3,5-Trimethylbenzene	U	500	494	29.8
2-Chlorotoluene	U	500	U	29.8
4-Chlorotoluene	U	500	U	29.8
tert-Butylbenzene	U	500	U	29.8
1,2,4-Trimethylbenzene	U	500	1950 J	29.8
sec-Butylbenzene	U	500	47.1	29.8
p-Isopropyltoluene	U	500	77.0	29.8
1,3-Dichlorobenzene	U	500	22.0 J	29.8
1,4-Dichlorobenzene	U	500	102	29.8
n-Butylbenzene	U	500	U	29.8
1,2-Dichlorobenzene	U	500	506	29.8
1,2-Dibromo-3-chloropropane	U	500	U	29.8
1,2,4-Trichlorobenzene	U	500	468	29.8
Hexachlorobutadiene	U	500	U	29.8
Naphthalene	U	500	4770 J	29.8
1,2,3-Trichlorobenzene	U	500	113	29.8

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: PEAC SOP 1807

Sample No Location Dilution Factor Percent Solids	Soil Blank B 083006-1		23884 SB015-20'	
	1 100		5 85	
Analyte	Result µg/kg	RL µg/kg	Result µg/kg	RL µg/kg
Dichlorodifluoromethane	U	5.00	U	29.4
Chloromethane	U	5.00	U	29.4
Vinyl Chloride	U	5.00	U	29.4
Bromomethane	U	5.00	U	29.4
Chloroethane	U	5.00	U	29.4
Trichlorofluoromethane	U	20.0	U	118
Acetone	U	5.00	U	29.4
1,1-Dichloroethene	U	5.00	9.12	29.4
Methylene Chloride	U	5.00	U	29.4
Carbon Disulfide	U	5.00	U	29.4
Methyl-t-butyl Ether	U	5.00	U	29.4
trans-1,2-Dichloroethene	U	5.00	U	29.4
1,1-Dichloroethane	U	5.00	U	29.4
2-Butanone	U	5.00	U	29.4
2,2-Dichloropropane	U	5.00	U	29.4
cis-1,2-Dichloroethene	U	5.00	U	29.4
Chloroform	U	5.00	U	29.4
1,1-Dichloropropene	U	5.00	U	29.4
1,2-Dichloroethane	U	5.00	347	29.4
1,1,1-Trichloroethane	U	5.00	U	29.4
Carbon Tetrachloride	U	5.00	U	29.4
Benzene	U	5.00	134	29.4
Trichloroethene	U	5.00	U	29.4
1,2-Dichloropropane	U	5.00	U	29.4
Bromochloromethane	U	5.00	U	29.4
Dibromomethane	U	5.00	U	29.4
cis-1,3-Dichloropropene	U	5.00	U	29.4
trans-1,3-Dichloropropene	U	5.00	U	29.4
1,1,2-Trichloroethane	U	5.00	U	29.4
1,3-Dichloropropane	U	5.00	U	29.4
Dibromochloromethane	U	5.00	U	29.4
1,2-Dibromoethane	U	5.00	U	29.4
Bromoform	U	5.00	U	29.4
4-Methyl-2-pentanone	U	5.00	U	29.4
Toluene	U	5.00	U	29.4
2-Hexanone	U	5.00	U	29.4
Tetrachloroethene	U	5.00	U	29.4
Chlorobenzene	U	5.00	U	29.4
1,1,1,2-Tetrachloroethane	U	5.00	U	29.4
Ethylbenzene	U	10.0	U	58.8
p&m-Xylene	U	5.00	U	29.4
o-Xylene	U	5.00	U	29.4
Styrene	U	5.00	U	29.4
Isopropylbenzene	U	5.00	U	29.4
1,1,2,2-Tetrachloroethane	U	5.00	U	29.4
1,2,3-Trichloropropane	U	5.00	U	29.4
n-Propylbenzene	U	5.00	U	29.4
Bromobenzene	U	5.00	U	29.4
1,3,5-Trimethylbenzene	U	5.00	U	29.4
2-Chlorotoluene	U	5.00	U	29.4
4-Chlorotoluene	U	5.00	U	29.4
tert-Butylbenzene	U	5.00	U	29.4
1,2,4-Trimethylbenzene	U	5.00	U	29.4
sec-Butylbenzene	U	5.00	U	29.4
p-Isopropyltoluene	U	5.00	U	29.4
1,3-Dichlorobenzene	U	5.00	U	29.4
1,4-Dichlorobenzene	U	5.00	U	29.4
n-Butylbenzene	U	5.00	U	29.4
1,2-Dichlorobenzene	U	5.00	U	29.4
1,2-Dibromo-3-chloropropane	U	5.00	U	29.4
1,2,4-Trichlorobenzene	U	5.00	U	29.4
Hexachlorobenzene	U	5.00	U	29.4
1,2,3-Trichlorobenzene	U	5.00	U	29.4

0144



Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198/Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Method: REAC SOP 1807		MeOH Blank B 090506-2		04628 SB023-16		23894 SB023-20		00391 SB028-17.5	
Sample No				50		100		1000	
Location				100000		100		82	
Dilution Factor				34		80			
Percent Solids									
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	
Dichlorodifluoromethane	U	250	U	595000	U	625	U	6100	
Chloromethane	U	250	U	595000	U	625	U	6100	
Vinyl Chloride	U	250	U	595000	U	625	U	6100	
Bromomethane	U	250	U	595000	U	625	U	6100	
Chloroethane	U	250	U	595000	U	625	U	6100	
Trichlorofluoromethane	U	1000	U	2380000	U	2500	U	24400	
Acetone	U	250	U	595000	U	625	8350	6100	
1,1-Dichloroethene	U	250	U	595000	165	625	U	6100	
Methylene Chloride	U	250	U	595000	U	625	U	6100	
Carbon Disulfide	U	250	U	595000	U	625	U	6100	
Methyl-t-butyl Ether	U	250	U	595000	U	625	1800	J 6100	
trans-1,2-Dichloroethene	U	250	U	595000	U	625	U	6100	
1,1-Dichloroethane	U	250	U	595000	U	625	U	6100	
2-Butanone	U	250	U	595000	U	625	U	6100	
2,2-Dichloropropane	U	250	U	595000	U	625	U	6100	
cis-1,2-Dichloroethene	U	250	U	595000	U	625	U	6100	
Chloroform	U	250	U	595000	U	625	U	6100	
1,1-Dichloropropene	U	250	U	595000	U	625	811000	61000	
1,2-Dichloroethane	U	250	23600000	595000	12800	625	U	6100	
1,1,1-Trichloroethane	U	250	U	595000	U	625	U	6100	
Carbon Tetrachloride	U	250	U	595000	U	625	4760	J 6100	
Benzene	U	250	13000000	595000	2540	625	U	6100	
Trichloroethene	U	250	U	595000	U	625	U	6100	
1,2-Dichloropropane	U	250	U	595000	U	625	U	6100	
Bromodichloromethane	U	250	U	595000	U	625	U	6100	
Dibromomethane	U	250	U	595000	U	625	U	6100	
cis-1,3-Dichloropropene	U	250	U	595000	U	625	U	6100	
trans-1,3-Dichloropropene	U	250	U	595000	U	625	U	6100	
1,1,2-Trichloroethane	U	250	U	595000	U	625	U	6100	
1,3-Dichloropropane	U	250	U	595000	U	625	U	6100	
Dibromochloromethane	U	250	U	595000	U	625	U	6100	
1,2-Dibromoethane	U	250	U	595000	U	625	U	6100	
Bromoform	U	250	U	595000	U	625	U	6100	
4-Methyl-2-pentanone	U	250	U	595000	U	625	U	6100	
Toluene	U	250	U	595000	U	625	U	6100	
2-Hexanone	U	250	U	595000	U	625	U	6100	
Tetrachloroethene	U	250	U	595000	U	625	U	6100	
Chlorobenzene	U	250	U	595000	U	625	U	6100	
1,1,1,2-Tetrachloroethane	U	250	U	595000	U	625	U	12200	
Ethylbenzene	U	500	U	1190000	U	1250	U	6100	
p&m-Xylene	U	250	U	595000	U	625	U	6100	
o-Xylene	U	250	U	595000	U	625	U	6100	
Styrene	U	250	U	595000	U	625	U	6100	
Isopropylbenzene	U	250	U	595000	U	625	U	6100	
1,1,2,2-Tetrachloroethane	U	250	U	595000	U	625	U	6100	
1,2,3-Trichloropropane	U	250	U	595000	U	625	U	6100	
n-Propylbenzene	U	250	U	595000	U	625	U	6100	
Bromobenzene	U	250	U	595000	U	625	U	6100	
1,3,5-Trimethylbenzene	U	250	U	595000	U	625	U	6100	
2-Chlorotoluene	U	250	U	595000	U	625	U	6100	
4-Chlorotoluene	U	250	U	595000	U	625	U	6100	
tert-Butylbenzene	U	250	U	595000	U	625	U	6100	
1,2,4-Trimethylbenzene	U	250	U	595000	U	625	U	6100	
sec-Butylbenzene	U	250	U	595000	U	625	U	6100	
p-Isopropyltoluene	U	250	U	595000	U	625	U	6100	
1,3-Dichlorobenzene	U	250	U	595000	U	625	U	6100	
1,4-Dichlorobenzene	U	250	U	595000	U	625	U	6100	
n-Butylbenzene	U	250	U	595000	U	625	U	6100	
1,2-Dichlorobenzene	U	250	U	595000	U	625	U	6100	
1,2-Dibromo-3-chloropropane	U	250	U	595000	U	625	U	6100	
1,2,4-Trichlorobenzene	U	250	U	595000	U	625	U	6100	
Hexachlorobutadiene	U	250	U	595000	U	625	U	6100	
Naphthalene	U	250	U	595000	U	625	U	6100	
1,2,3-Trichlorobenzene	U	250	U	595000	U	625	U	6100	

Table 1.1 Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No: MeOH Blank A 082706-1 19167  
Location: SB005-20'  
Dilution Factor 50 500  
Percent Solids 100 82

Analyte	Result µg/L	RL µg/Kg	Result µg/L	RL µg/Kg
Dichlorodifluoromethane	U	250	U	3050
Chloromethane	U	250	U	3050
Vinyl Chloride	U	250	U	3050
Bromomethane	U	250	U	3050
Chloroethane	U	250	U	3050
Trichlorofluoromethane	U	1000	U	12200
Acetone	U	250	1320 J	3050
1,1-Dichloroethene	U	250	U	3050
Methylene Chloride	U	250	U	3050
Carbon Disulfide	U	250	U	3050
Methyl-t-butyl Ether	U	250	U	3050
trans-1,2-Dichloroethene	U	250	U	3050
1,1-Dichloroethane	U	250	U	3050
2-Butanone	U	250	U	3050
2,2-Dichloropropane	U	250	U	3050
cis-1,2-Dichloroethene	U	250	U	3050
Chloroform	U	250	U	3050
1,1-Dichloropropene	U	250	U	3050
1,2-Dichloroethane	U	250	580000 J	61000
1,1,1-Trichloroethane	U	250	U	3050
Carbon Tetrachloride	U	250	U	3050
Benzene	U	250	1040 J	3050
Trichloroethene	U	250	U	3050
1,2-Dichloropropane	U	250	U	3050
Bromodichloromethane	U	250	U	3050
Dibromomethane	U	250	U	3050
cis-1,3-Dichloropropene	U	250	U	3050
trans-1,3-Dichloropropene	U	250	U	3050
1,1,2-Trichloroethane	U	250	U	3050
1,3-Dichloropropane	U	250	U	3050
Dibromochloromethane	U	250	U	3050
1,2-Dibromoethane	U	250	U	3050
Bromoform	U	250	U	3050
4-Methyl-2-pentanone	U	250	U	3050
Toluene	U	250	U	3050
2-Hexanone	U	250	U	3050
Tetrachloroethene	U	250	U	3050
Chlorobenzene	U	250	U	3050
1,1,1,2-Tetrachloroethane	U	250	U	3050
Ethylbenzene	U	500	U	6100
p&m-Xylene	U	250	U	3050
o-Xylene	U	250	U	3050
Styrene	U	250	U	3050
Isopropylbenzene	U	250	U	3050
1,1,2,2-Tetrachloroethane	U	250	U	3050
1,2,3-Trichloropropane	U	250	U	3050
n-Propylbenzene	U	250	U	1050
Bromobenzene	U	250	U	3050
1,3,5-Tmmethylbenzene	U	250	U	3050
2-Chlorotoluene	U	250	U	3050
4-Chlorotoluene	U	250	U	3050
tert-Butylbenzene	U	250	U	3050
1,2,4-Tmmethylbenzene	U	250	U	3050
sec-Butylbenzene	U	250	U	3050
p-Isopropyltoluene	U	250	U	3050
1,3-Dichlorobenzene	U	250	U	3050
1,4-Dichlorobenzene	U	250	U	3050
n-Butylbenzene	U	250	U	3050
1,2-Dichlorobenzene	U	250	U	3050
1,2-Dibromo-3-chloropropane	U	250	U	3050
1,2,4-Trichlorobenzene	U	250	U	3050
Hexachlorobutadiene	U	250	U	3050
Naphthalene	U	250	U	3050
1,2,3-Trichlorobenzene	U	250	U	3050

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Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Method: REAC SOP 1807	MeOH Blank A 082906-1		15136 SB0017-20'		15139 SB0018-15'		15140 SB0018-20'		15141 SB0018-25'	
Sample No:										
Location:										
Dilution Factor	50		50		50		500		50	
Percent Solids	100		65		82		79		88	
Analyte	Result µg/L	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	250	U	294	U	305	U	3160	U	284
Chloromethane	U	250	U	294	U	305	U	3160	U	284
Vinyl Chloride	U	250	U	294	U	305	U	3160	U	284
Bromomethane	U	250	U	294	U	305	U	3160	U	284
Chloroethane	U	250	U	294	U	305	U	3160	U	284
Trichlorofluoromethane	U	250	U	294	U	305	U	3160	U	1140
Acetone	U	1000	178	J	1180	U	1220	1860	J	12700
1,1-Dichloroethene	U	250	U	294	145	J	305	3210	U	3160
Methylene Chloride	U	250	149	J	294	167	J	305	U	3160
Carbon Disulfide	U	250	U	294	U	305	U	3160	U	284
Methyl-t-butyl Ether	U	250	U	294	U	305	U	3160	U	284
trans-1,2-Dichloroethene	U	250	U	294	80.5	J	305	1180	J	3160
1,1-Dichloroethane	U	250	U	294	U	305	U	3160	U	284
2-Butanone	U	250	U	294	U	305	U	3160	U	284
2,2-Dichloropropane	U	250	U	294	U	305	U	3160	U	284
cis-1,2-Dichloroethene	U	250	U	294	U	305	U	3160	U	284
Chloroform	U	250	U	294	U	305	U	3160	U	284
1,1-Dichloropropene	U	250	U	294	U	305	U	3160	U	284
1,2-Dichloroethane	U	250	885	U	294	3660	U	93200	U	3160
1,1,1-Trichloroethane	U	250	U	294	U	305	U	3160	U	284
Carbon Tetrachloride	U	250	U	294	U	305	U	3160	U	284
Benzene	U	250	125	J	294	U	305	3360	U	3160
Trichloroethene	U	250	U	294	U	305	U	3160	U	284
1,2-Dichloropropane	U	250	U	294	U	305	U	3160	U	284
Bromodichloromethane	U	250	U	294	U	305	U	3160	U	284
Dibromomethane	U	250	U	294	U	305	U	3160	U	284
cis-1,3-Dichloropropene	U	250	U	294	U	305	U	3160	U	284
trans-1,3-Dichloropropene	U	250	U	294	U	305	U	3160	U	284
1,1,2-Trichloroethane	U	250	U	294	U	305	U	3160	U	284
1,3-Dichloropropane	U	250	U	294	U	305	U	3160	U	284
Dibromochloromethane	U	250	U	294	U	305	U	3160	U	284
1,2-Dibromoethane	U	250	U	294	U	305	U	3160	U	284
Bromoform	U	250	U	294	U	305	U	3160	U	284
4-Methyl-2-pentanone	U	250	U	294	U	305	U	3160	U	284
Toluene	U	250	U	294	U	305	U	3160	U	284
2-Hexanone	U	250	U	294	U	305	U	3160	U	284
Tetrachloroethene	U	250	U	294	U	305	U	3160	U	284
Chlorobenzene	U	250	U	294	U	305	U	3160	U	284
1,1,1,2-Tetrachloroethane	U	250	U	294	U	305	U	3160	U	568
Ethylbenzene	U	500	U	588	U	610	U	6330	U	284
p&m-Xylene	U	250	U	294	U	305	U	3160	U	284
o-Xylene	U	250	U	294	U	305	U	3160	U	284
Styrene	U	250	U	294	U	305	U	3160	U	284
Isopropylbenzene	U	250	U	294	U	305	U	3160	U	284
1,1,2,2-Tetrachloroethane	U	250	U	294	U	305	U	3160	U	284
1,2,3-Trichloropropane	U	250	U	294	U	305	U	3160	U	284
n-Propylbenzene	U	250	U	294	U	305	U	3160	U	284
Bromobenzene	U	250	U	294	U	305	U	3160	U	284
1,3,5-Trimethylbenzene	U	250	U	294	U	305	U	3160	U	284
2-Chlorotoluene	U	250	U	294	U	305	U	3160	U	284
4-Chlorotoluene	U	250	U	294	U	305	U	3160	U	284
tert-Butylbenzene	U	250	U	294	U	305	U	3160	U	284
1,2,4-Trimethylbenzene	U	250	U	294	U	305	U	3160	U	284
sec-Butylbenzene	U	250	U	294	U	305	U	3160	U	284
p-Isopropyltoluene	U	250	U	294	U	305	U	3160	U	284
1,3-Dichlorobenzene	U	250	U	294	U	305	U	3160	U	284
1,4-Dichlorobenzene	U	250	U	294	U	305	U	3160	U	284
n-Butylbenzene	U	250	U	294	U	305	U	3160	U	284
1,2-Dichlorobenzene	U	250	U	294	U	305	U	3160	U	284
1,2-Dibromo-3-chloropropane	U	250	U	294	U	305	U	3160	U	284
1,2,4-Trichlorobenzene	U	250	U	294	U	305	U	3160	U	284
Hexachlorobutadiene	U	250	U	294	U	305	U	3160	U	284
Naphthalene	U	250	U	294	U	305	U	3160	U	284
1,2,3-Trichlorobenzene	U	250	U	294	U	305	U	3160	U	284

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No:	MeOH Blank A 082908-1		23719 SB009-14'		23718 SB009-17'	
	50		5000		5000	
Location:	100		82		81	
Dilution Factor						
Percent Solids						
Analyte	Result µg/L	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	250	U	30500	U	30900
Chloromethane	U	250	U	30500	U	30900
Vinyl Chloride	U	250	U	30500	U	30900
Bromomethane	U	250	U	30500	U	30900
Chloroethane	U	250	U	30500	U	30900
Trichlorofluoromethane	U	1000	U	122000	U	123000
Acetone	U	250	U	30500	19300 J	30900
1,1-Dichloroethene	U	250	U	30500	R	30900
Methylene Chloride	U	250	U	30500	U	30900
Carbon Disulfide	U	250	U	30500	U	30900
Methyl-t-butyl Ether	U	250	U	30500	U	30900
trans-1,2-Dichloroethene	U	250	U	30500	U	30900
1,1-Dichloroethane	U	250	U	30500	U	30900
2-Butanone	U	250	U	30500	U	30900
2,2-Dichloropropane	U	250	U	30500	U	30900
cis-1,2-Dichloroethene	U	250	U	30500	U	30900
Chloroform	U	250	U	30500	U	30900
1,1-Dichloropropene	U	250	U	30500	U	30900
1,2-Dichloroethane	U	250	867000	30500	19300000	1540000
1,1,1-Trichloroethane	U	250	U	30500	U	30900
Carbon Tetrachloride	U	250	U	30500	U	30900
Benzene	U	250	266000	30500	6830000	1540000
Trichloroethene	U	250	U	30500	U	30900
1,2-Dichloropropane	U	250	U	30500	U	30900
Bromodichloromethane	U	250	U	30500	U	30900
Dibromomethane	U	250	U	30500	U	30900
cis-1,3-Dichloropropene	U	250	U	30500	U	30900
trans-1,3-Dichloropropene	U	250	U	30500	8700 J	30900
1,1,2-Trichloroethane	U	250	U	30500	U	30900
1,3-Dichloropropane	U	250	U	30500	U	30900
Dibromochloromethane	U	250	U	30500	U	30900
1,2-Dibromoethane	U	250	U	30500	U	30900
Bromoform	U	250	U	30500	U	30900
4-Methyl-2-pentanone	U	250	U	30500	27500 J	30900
Toluene	U	250	U	30500	U	30900
2-Hexanone	U	250	U	30500	U	30900
Tetrachloroethene	U	250	U	30500	U	30900
Chlorobenzene	U	250	U	30500	U	30900
1,1,1,2-Tetrachloroethane	U	250	U	30500	U	30900
Ethylbenzene	U	500	U	61000	U	61700
p&m-Xylene	U	250	U	30500	U	30900
o-Xylene	U	250	U	30500	U	30900
Styrene	U	250	U	30500	U	30900
Isopropylbenzene	U	250	U	30500	U	30900
1,1,2,2-Tetrachloroethane	U	250	U	30500	U	30900
1,2,3-Trichloropropane	U	250	U	30500	U	30900
n-Propylbenzene	U	250	U	30500	U	30900
Bromobenzene	U	250	U	30500	41200	30900
1,3,5-Trimethylbenzene	U	250	U	30500	U	30900
2-Chlorotoluene	U	250	U	30500	U	30900
4-Chlorotoluene	U	250	U	30500	U	30900
tert-Butylbenzene	U	250	U	30500	U	30900
1,2,4-Trimethylbenzene	U	250	U	30500	U	30900
sec-Butylbenzene	U	250	U	30500	U	30900
p-Isopropyltoluene	U	250	U	30500	U	30900
1,3-Dichlorobenzene	U	250	U	30500	U	30900
1,4-Dichlorobenzene	U	250	U	30500	U	30900
n-Butylbenzene	U	250	U	30500	U	30900
1,2-Dichlorobenzene	U	250	U	30500	U	30900
1,2-Dibromo-3-chloropropane	U	250	U	30500	U	30900
1,2,4-Trichlorobenzene	U	250	U	30500	U	30900
Hexachlorobutadiene	U	250	U	30500	U	30900
Naphthalene	U	250	U	30500	U	30900
1,2,3-Trichlorobenzene	U	250	U	30500	U	30900

rv\_23-48

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # D-198 Westal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No:	MeOH Blank A 083006-1		15,42 SB009-5'		19166 SB009-12.5'	
	50		50		2000	
Location:	50		83		82	
Dilution Factor	100					
Percent Solids						
Analyte	Result µg/L	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	250	U	291	U	12200
Chloromethane	U	250	U	291	U	12200
Vinyl Chloride	U	250	U	291	U	12200
Bromomethane	U	250	U	291	U	12200
Chloroethane	U	250	U	291	U	12200
Trichlorofluoromethane	U	1000	U	1160	U	48800
Acetone	U	250	U	291	U	12200
1,1-Dichloroethene	U	250	U	291	U	12200
Methylene Chloride	U	250	U	291	U	12200
Carbon Disulfide	U	250	U	291	U	12200
Methyl-t-butyl Ether	U	250	U	291	U	12200
trans-1,2-Dichloroethene	U	250	U	291	U	12200
1,1-Dichloroethane	U	250	U	291	U	12200
2-Butanone	U	250	U	291	U	12200
2,2-Dichloropropane	U	250	U	291	U	12200
cis-1,2-Dichloroethene	U	250	U	291	U	12200
Chloroform	U	250	U	291	U	12200
1,1-Dichloropropene	U	250	U	291	U	12200
1,2-Dichloroethane	U	250	1640	291	136000	12200
1,1,1-Trichloroethane	U	250	U	291	U	12200
Carbon Tetrachloride	U	250	U	291	U	12200
Benzene	U	250	1950	291	86200	12200
Trichloroethene	U	250	U	291	U	12200
1,2-Dichloropropane	U	250	U	291	U	12200
Bromodichloromethane	U	250	U	291	U	12200
Dibromomethane	U	250	U	291	U	12200
cis-1,3-Dichloropropene	U	250	U	291	U	12200
trans-1,3-Dichloropropene	U	250	U	291	U	12200
1,1,2-Trichloroethane	U	250	U	291	U	12200
1,3-Dichloropropane	U	250	U	291	U	12200
Dibromochloromethane	U	250	U	291	U	12200
1,2-Dibromoethane	U	250	U	291	U	12200
Bromoform	U	250	U	291	U	12200
4-Methyl-2-pentanone	U	250	133	291	U	12200
Toluene	U	250	U	291	U	12200
2-Hexanone	U	250	U	291	U	12200
Tetrachloroethene	U	250	U	291	U	12200
Chlorobenzene	U	250	U	291	U	12200
1,1,1,2-Tetrachloroethane	U	250	U	291	U	12200
Ethylbenzene	U	500	94.2	581	U	24400
p&m-Xylene	U	250	U	291	U	12200
o-Xylene	U	250	U	291	U	12200
Styrene	U	250	U	291	U	12200
Isopropylbenzene	U	250	U	291	U	12200
1,1,2,2-Tetrachloroethane	U	250	U	291	U	12200
1,2,3-Trichloropropane	U	250	U	291	U	12200
n-Propylbenzene	U	250	U	291	U	12200
Bromobenzene	U	250	389	291	U	12200
1,3,5-Trimethylbenzene	U	250	U	291	U	12200
2-Chlorotoluene	U	250	U	291	U	12200
4-Chlorotoluene	U	250	U	291	U	12200
tert-Butylbenzene	U	250	U	291	U	12200
1,2,4-Trimethylbenzene	U	250	U	291	U	12200
sec-Butylbenzene	U	250	U	291	U	12200
p-Isopropyltoluene	U	250	U	291	U	12200
1,3-Dichlorobenzene	U	250	U	291	U	12200
1,4-Dichlorobenzene	U	250	U	291	U	12200
n-Butylbenzene	U	250	U	291	U	12200
1,2-Dichlorobenzene	U	250	U	291	U	12200
1,2-Dibromo-3-chloropropane	U	250	220	291	U	12200
1,2,4-Trichlorobenzene	U	250	U	291	U	12200
Hexachlorobutadiene	U	250	U	291	U	12200
Naphthalene	U	250	14.4	291	U	12200
1,2,3-Trichlorobenzene	U	250	U	291	U	12200

Table 1 2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No: MeOH Blank A 083106-2 23740  
Location: SB012-17'  
Dilution Factor 50 500  
Percent Solids 100 83

Analyte	Result µg/L	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	250	U	3010
Chloromethane	U	250	U	3010
Vinyl Chloride	U	250	U	3010
Bromomethane	U	250	U	3010
Chloroethane	U	250	U	3010
Trichlorofluoromethane	U	250	U	3010
Acetone	U	250	U	3010
1,1-Dichloroethene	U	250	U	3010
Methylene Chloride	U	250	U	3010
Carbon Disulfide	U	250	U	3010
Methyl-t-butyl Ether	U	250	U	3010
trans-1,2-Dichloroethene	U	250	U	3010
1,1-Dichloroethane	U	250	U	3010
2-Butanone	U	250	U	3010
2,2-Dichloropropane	U	250	U	3010
cis-1,2-Dichloroethene	U	250	U	3010
Chloroform	U	250	U	3010
1,1-Dichloropropene	U	250	U	3010
1,2-Dichloroethane	U	250	63400	3010
1,1,1-Trichloroethane	U	250	U	3010
Carbon Tetrachloride	U	250	U	3010
Benzene	U	250	28900	3010
Trichloroethene	U	250	U	3010
1,2-Dichloropropane	U	250	U	3010
Bromodichloromethane	U	250	U	3010
Dibromomethane	U	250	U	3010
cis-1,3-Dichloropropene	U	250	U	3010
trans-1,3-Dichloropropene	U	250	U	3010
1,1,2-Trichloroethane	U	250	U	3010
1,3-Dichloropropane	U	250	U	3010
Dibromochloromethane	U	250	U	3010
1,2-Dibromoethane	U	250	U	3010
Bromoform	U	250	U	3010
4-Methyl-2-pentanone	U	250	U	3010
Toluene	U	250	U	3010
2-Hexanone	U	250	U	3010
Tetrachloroethene	U	250	U	3010
Chlorobenzene	U	250	U	3010
1,1,1,2-Tetrachloroethane	U	250	U	3010
Ethylbenzene	U	250	U	3010
p&m-Xylene	U	250	U	3010
o-Xylene	U	250	U	3010
Styrene	U	250	U	3010
Isopropylbenzene	U	250	U	3010
1,1,2,2-Tetrachloroethane	U	250	U	3010
1,2,3-Trichloropropane	U	250	U	3010
n-Propylbenzene	U	250	U	3010
Bromobenzene	U	250	U	3010
1,3,5-Tnmethylbenzene	U	250	U	3010
2-Chlorotoluene	U	250	U	3010
4-Chlorotoluene	U	250	U	3010
tert-Butylbenzene	U	250	U	3010
1,2,4-Tnmethylbenzene	U	250	U	3010
sec-Butylbenzene	U	250	U	3010
p-Isopropyltoluene	U	250	U	3010
1,3-Dichlorobenzene	U	250	U	3010
1,4-Dichlorobenzene	U	250	U	3010
n-Butylbenzene	U	250	U	3010
1,2-Dichlorobenzene	U	250	U	3010
1,2-Dibromo-3-chloropropane	U	250	U	3010
1,2,4-Trichlorobenzene	U	250	U	3010
Hexachlorobutadiene	U	250	U	3010
Naphthalene	U	250	U	3010
1,2,3-Trichlorobenzene	U	250	U	3010

v\_2050

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vernal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Method: REAC SOP 1807		MeOH Blank A 090606-1		23485 SB07-7-20		00395 SB022-15		23891 SB022-20		00625 SB022-16	
Sample No				50		10000		100		500	
Location:				20		82		87		88	
Dilution Factor		100									
Percent Solids											
Analyte	Result µg/L	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	Result µg/Kg
Dichlorodifluoromethane	U	250	U	122	U	61000	U	575	U	2840	
Chloromethane	U	250	U	122	U	61000	U	575	U	2840	
Vinyl Chloride	U	250	U	122	U	61000	U	575	U	2840	
Bromomethane	U	250	U	122	U	61000	U	575	U	2840	
Chloroethane	U	250	U	122	U	61000	U	575	U	2840	
Trichlorofluoromethane	U	250	U	122	U	61000	U	2300	U	11400	
Acetone	U	1000	U	488	U	244000	U	575	U	2840	
1,1-Dichloroethene	U	250	169	122	28700	J	61000	213	J	575	
Methylene Chloride	U	250	U	122	U	61000	U	575	U	2840	
Carbon Disulfide	U	250	U	122	U	61000	U	575	U	2840	
Methyl-t-butyl Ether	U	250	U	122	U	61000	U	575	U	2840	
trans-1,2-Dichloroethene	U	250	U	122	U	61000	U	575	U	2840	
1,1-Dichloroethane	U	250	56.1	J	122	U	61000	U	J	575	
2-Butanone	U	J	250	U	J	122	U	J	575	U	
2,2-Dichloropropane	U	250	U	122	U	61000	U	575	U	2840	
cis-1,2-Dichloroethene	U	250	U	122	U	61000	U	575	U	2840	
Chloroform	U	250	U	122	U	61000	U	575	U	2840	
1,1-Dichloropropene	U	250	U	122	U	61000	U	575	12100	2840	
1,2-Dichloroethane	U	250	317	122	9550000	610000	12800	575	U	2840	
1,1,1-Trichloroethane	U	250	U	122	U	61000	U	575	U	2840	
Carbon Tetrachloride	U	250	U	122	U	61000	U	575	5040	2840	
Benzene	U	250	129	122	1500000	61000	U	575	U	2840	
Trichloroethene	U	250	U	122	U	61000	U	575	U	2840	
1,2-Dichloropropane	U	250	U	122	U	61000	U	575	U	2840	
Bromodichloromethane	U	250	U	122	U	61000	U	575	U	2840	
Dibromomethane	U	250	U	122	U	61000	U	575	U	2840	
cis-1,3-Dichloropropene	U	250	U	122	U	61000	U	575	U	2840	
trans-1,3-Dichloropropene	U	250	U	122	U	61000	U	575	U	2840	
1,1,2-Trichloroethane	U	250	U	122	U	61000	U	575	U	2840	
1,3-Dichloropropane	U	250	U	122	U	61000	U	575	U	2840	
Dibromochloromethane	U	250	U	122	U	61000	U	575	U	2840	
1,2-Dibromoethane	U	250	U	122	U	61000	U	575	U	2840	
Bromoform	U	250	U	122	U	61000	U	575	U	2840	
4-Methyl-2-pentanone	U	250	U	122	U	61000	U	575	U	2840	
Toluene	U	250	U	122	U	61000	U	575	U	2840	
2-Hexanone	U	250	U	122	U	61000	U	575	U	2840	
Tetrachloroethene	U	250	U	122	U	61000	U	575	U	2840	
Chlorobenzene	U	250	U	122	U	61000	U	575	U	2840	
1,1,1,2-Tetrachloroethane	U	250	U	122	U	61000	U	575	U	5680	
Ethylbenzene	U	500	U	244	U	122000	U	1150	U	2840	
p&m-Xylene	U	250	U	122	U	61000	U	575	U	2840	
o-Xylene	U	250	U	122	U	61000	U	575	U	2840	
Styrene	U	250	U	122	U	61000	U	575	U	2840	
Isopropylbenzene	U	250	U	122	U	61000	U	575	U	2840	
1,1,2,2-Tetrachloroethane	U	250	U	122	U	61000	U	575	U	2840	
1,2,3-Trichloropropane	U	250	U	122	U	61000	U	575	U	2840	
n-Propylbenzene	U	250	U	122	U	61000	U	575	U	2840	
Bromobenzene	U	250	U	122	U	61000	U	575	U	2840	
1,3,5-Trimethylbenzene	U	250	U	122	U	61000	U	575	U	2840	
2-Chlorotoluene	U	250	U	122	U	61000	U	575	U	2840	
4-Chlorotoluene	U	250	U	122	U	61000	U	575	U	2840	
tert-Butylbenzene	U	250	U	122	U	61000	U	575	U	2840	
1,2,4-Trimethylbenzene	U	250	U	122	U	61000	U	575	U	2840	
sec-Butylbenzene	U	250	U	122	U	61000	U	575	U	2840	
p-Isopropyltoluene	U	250	U	122	U	61000	U	575	U	2840	
1,3-Dichlorobenzene	U	250	U	122	U	61000	U	575	U	2840	
1,4-Dichlorobenzene	U	250	U	122	U	61000	U	575	U	2840	
n-Butylbenzene	U	250	U	122	U	61000	U	575	U	2840	
1,2-Dichlorobenzene	U	250	U	122	U	61000	U	575	U	2840	
1,2-Dibromo-3-chloropropane	U	250	U	122	U	61000	U	575	U	2840	
1,2,4-Trichlorobenzene	U	250	U	122	U	61000	U	575	2020	J	
Hexachlorobutadiene	U	250	U	122	U	61000	U	575	U	2840	
Naphthalene	U	250	U	122	U	61000	U	575	U	2840	
1,2,3-Trichlorobenzene	U	250	U	122	U	61000	U	575	U	2840	

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No	MeOH Blank A 090606-1		00626		00629		00627		23897	
Location:			SB023-11.5		SB023-12.5		SB023-15		SB028-16.5	
Dilution Factor	50		1000		10000		50000		1000	
Percent Solids	100		81		80		80		80	
Analyte	Result µg/L	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	250	U	6170	U	62500	U	313000	U	6250
Chloromethane	U	250	U	6170	U	62500	U	313000	U	6250
Vinyl Chloride	U	250	U	6170	U	62500	U	313000	U	6250
Bromomethane	U	250	U	6170	U	62500	U	313000	U	6250
Chloroethane	U	250	U	6170	U	62500	U	313000	U	6250
Trichlorofluoromethane	U	250	U	24700	U	250000	U	1250000	U	250000
Acetone	U	1000	U	6170	U	62500	U	313000	38000	6250
1,1-Dichloroethene	U	250	U	6170	U	62500	U	313000	U	6250
Methylene Chloride	U	250	U	6170	U	62500	U	313000	U	6250
Carbon Disulfide	U	250	U	6170	U	62500	U	313000	U	6250
Methyl-t-butyl Ether	U	250	U	6170	U	62500	U	313000	5340	6250
trans-1,2-Dichloroethene	U	250	U	6170	U	62500	U	313000	U	6250
1,1-Dichloroethane	U	250	U	6170	U	62500	U	313000	U	6250
2-Butanone	U	250	U	6170	U	62500	U	313000	U	6250
2,2-Dichloropropane	U	250	U	6170	U	62500	U	313000	U	6250
cis-1,2-Dichloroethene	U	250	U	6170	U	62500	U	313000	U	6250
Chloroform	U	250	U	6170	U	62500	U	313000	U	6250
1,1-Dichloropropene	U	250	U	6170	U	62500	U	313000	U	6250
1,2-Dichloroethane	U	250	35700	6170	579000	62500	2780000	313000	4730000	313000
1,1,1-Trichloroethane	U	250	U	6170	U	62500	U	313000	U	6250
Carbon Tetrachloride	U	250	U	6170	U	62500	U	313000	12600	6250
Benzene	U	250	115000	6170	539000	62500	783000	313000	U	6250
Trichloroethene	U	250	U	6170	U	62500	U	313000	U	6250
1,2-Dichloropropane	U	250	U	6170	U	62500	U	313000	U	6250
Bromodichloromethane	U	250	U	6170	U	62500	U	313000	U	6250
Dibromomethane	U	250	U	6170	U	62500	U	313000	U	6250
cis-1,3-Dichloropropene	U	250	U	6170	U	62500	U	313000	U	6250
trans-1,3-Dichloropropene	U	250	U	6170	U	62500	U	313000	U	6250
1,1,2-Trichloroethane	U	250	U	6170	U	62500	U	313000	U	6250
1,3-Dichloropropane	U	250	U	6170	U	62500	U	313000	U	6250
Dibromochloromethane	U	250	U	6170	U	62500	U	313000	U	6250
1,2-Dibromoethane	U	250	U	6170	U	62500	U	313000	U	6250
Bromoform	U	250	U	6170	U	62500	U	313000	U	6250
4-Methyl-2-pentanone	U	250	U	6170	U	62500	U	313000	U	6250
Toluene	U	250	U	6170	U	62500	U	313000	U	6250
2-Hexanone	U	250	U	6170	U	62500	U	313000	U	6250
Tetrachloroethene	U	250	U	6170	U	62500	U	313000	U	6250
Chlorobenzene	U	250	U	6170	U	62500	U	313000	U	6250
1,1,1,2-Tetrachloroethane	U	250	U	6170	U	62500	U	313000	U	6250
Ethylbenzene	U	500	U	12300	U	125000	U	625000	U	12500
p&m-Xylene	U	250	U	6170	U	62500	U	313000	U	6250
o-Xylene	U	250	U	6170	U	62500	U	313000	U	6250
Styrene	U	250	U	6170	U	62500	U	313000	U	6250
Isopropylbenzene	U	250	U	6170	U	62500	U	313000	U	6250
1,1,2,2-Tetrachloroethane	U	250	U	6170	U	62500	U	313000	U	6250
1,2,3-Trichloropropane	U	250	U	6170	U	62500	U	313000	U	6250
n-Propylbenzene	U	250	U	6170	U	62500	U	313000	U	6250
Bromobenzene	U	250	U	6170	U	62500	U	313000	U	6250
1,3,5-Trimethylbenzene	U	250	U	6170	U	62500	U	313000	U	6250
2-Chlorotoluene	U	250	U	6170	U	62500	U	313000	U	6250
4-Chlorotoluene	U	250	U	6170	U	62500	U	313000	U	6250
tert-Butylbenzene	U	250	U	6170	U	62500	U	313000	U	6250
1,2,4-Trimethylbenzene	U	250	U	6170	U	62500	U	313000	U	6250
sec-Butylbenzene	U	250	U	6170	U	62500	U	313000	U	6250
p-Isopropyltoluene	U	250	U	6170	U	62500	U	313000	U	6250
1,3-Dichlorobenzene	U	250	U	6170	U	62500	U	313000	U	6250
1,4-Dichlorobenzene	U	250	U	6170	U	62500	U	313000	U	6250
n-Butylbenzene	U	250	U	6170	U	62500	U	313000	U	6250
1,2-Dichlorobenzene	U	250	U	6170	U	62500	U	313000	U	6250
1,2-Dibromo-3-chloropropane	U	250	2270	6170	U	62500	U	313000	U	6250
1,2,4-Trichlorobenzene	U	250	U	6170	U	62500	U	313000	U	6250
Hexachlorobutadiene	U	250	4840	6170	U	62500	U	313000	U	6250
Naphthalene	U	250	U	6170	U	62500	U	313000	U	6250
1,2,3-Trichlorobenzene	U	250	U	6170	U	62500	U	313000	U	6250

rv\_2354



Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-158 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

	MeOH Blank A 090606-1		00365		23895	
Sample No			SJ028-20		SB029-16	
Location:			1000		1000	
Dilution Factor	50		87		76	
Percent Solids	100					
	Result	RL	Result	RL	Result	RL
Analyte	µg/L	µg/Kg	µg/Kg	µg/Kg	µg/Kg	µg/Kg
Dichlorodifluoromethane	U	250	U	5750	U	6580
Chloromethane	U	250	U	5750	U	6580
Vinyl Chloride	U	250	U	5750	U	6580
Bromomethane	U	250	U	5750	U	6580
Chloroethane	U	250	U	5750	U	6580
Trichlorofluoromethane	U	250	U	5750	U	6580
Acetone	U	1000	U	23000	U	26300
1,1-Dichloroethene	U	250	U	5750	U	6580
Methylene Chloride	U	250	U	5750	U	6580
Carbon Disulfide	U	250	U	5750	U	6580
Methyl-t-butyl Ether	U	250	U	5750	U	6580
trans-1,2-Dichloroethene	U	250	U	5750	U	6580
1,1-Dichloroethane	U	250	U	5750	U	6580
2-Butanone	U	250	U	5750	U	6580
2,2-Dichloropropane	U	250	U	5750	U	6580
cis-1,2-Dichloroethene	U	250	U	5750	U	6580
Chloroform	U	250	U	5750	U	6580
1,1-Dichloropropene	U	250	U	5750	U	6580
1,2-Dichloroethane	U	250	52800	5750	15300	6580
1,1,1-Trichloroethane	U	250	U	5750	U	6580
Carbon Tetrachloride	U	250	U	5750	U	6580
Benzene	U	250	1630	5750	U	6580
Trichloroethene	U	250	U	5750	U	6580
1,2-Dichloropropane	U	250	U	5750	U	6580
Bromodichloromethane	U	250	U	5750	U	6580
Dibromomethane	U	250	U	5750	U	6580
cis-1,3-Dichloropropene	U	250	U	5750	U	6580
trans-1,3-Dichloropropene	U	250	U	5750	U	6580
1,1,2-Trichloroethane	U	250	U	5750	U	6580
1,3-Dichloropropane	U	250	U	5750	U	6580
Dibromochloromethane	U	250	U	5750	U	6580
1,2-Dibromoethane	U	250	U	5750	U	6580
Bromoform	U	250	U	5750	U	6580
4-Methyl-2-pentanone	U	250	U	5750	U	6580
Toluene	U	250	U	5750	U	6580
2-Hexanone	U	250	U	5750	U	6580
Tetrachloroethene	U	250	U	5750	U	6580
Chlorobenzene	U	250	U	5750	U	6580
1,1,1,2-Tetrachloroethane	U	250	U	5750	U	6580
Ethylbenzene	U	500	U	11500	U	13200
p,m-Xylene	U	250	U	5750	U	6580
o-Xylene	U	250	U	5750	U	6580
Styrene	U	250	U	5750	U	6580
Isopropylbenzene	U	250	U	5750	U	6580
1,1,2,2-Tetrachloroethane	U	250	U	5750	U	6580
1,2,3-Trichloropropane	U	250	U	5750	U	6580
n-Propylbenzene	U	250	U	5750	U	6580
Aromobenzene	U	250	U	5750	U	6580
1,3,5-Trimethylbenzene	U	250	U	5750	U	6580
2-Chlorotoluene	U	250	U	5750	U	6580
4-Chlorotoluene	U	250	U	5750	U	6580
tert-Butylbenzene	U	250	U	5750	U	6580
1,2,4-Trimethylbenzene	U	250	U	5750	U	6580
sec-Butylbenzene	U	250	U	5750	U	6580
p-Isopropyltoluene	U	250	U	5750	U	6580
1,3-Dichlorobenzene	U	250	U	5750	U	6580
1,4-Dichlorobenzene	U	250	U	5750	U	6580
n-Butylbenzene	U	250	U	5750	U	6580
1,2-Dichlorobenzene	U	250	U	5750	U	6580
1,2-Dibromo-3-chloropropane	U	250	U	5750	U	6580
1,2,4-Trichlorobenzene	U	250	U	5750	U	6580
Hexachlorocycladiene	U	250	U	5750	U	6580
Naphthalene	U	250	U	5750	U	6580
1,2,3-Trichlorobenzene	U	250	U	5750	U	6580

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No	MeOH Blank A 090708-1		23886		00634		00630		00397	
Location:	SB020-18.5-20		SB029-17.5		SB029-20		SB030-18			
Dilution Factor	50		50		1000		1000		1000	
Percent Solids	100		77		82		85		81	
Analyte	Result µg/L	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	250	U	325	U	6100	U	5880	U	6170
Chloromethane	U	250	U	325	U	6100	U	5880	U	6170
Vinyl Chloride	U	250	U	325	U	6100	U	5880	U	6170
Bromomethane	U	250	U	325	U	6100	U	5880	U	6170
Chloroethane	U	250	143	325	U	6100	U	5880	U	6170
Trichlorofluoromethane	U	1000	U	1300	U	24400	U	23500	U	24700
Acetone	U	250	520	325	U	6100	U	5880	U	6170
1,1-Dichloroethene	U	250	569	325	U	6100	U	5880	U	6170
Methylene Chloride	U	250	U	325	U	6100	U	5880	U	6170
Carbon Disulfide	U	250	U	325	U	6100	U	5880	U	6170
Methyl-t-butyl Ether	U	250	U	325	U	6100	U	5880	8230	6170
trans-1,2-Dichloroethene	U	250	U	325	U	6100	U	5880	U	6170
1,1-Dichloroethane	U	250	U	325	U	6100	U	5880	U	6170
2-Butanone	U	250	U	325	U	6100	U	5880	U	6170
2,2-Dichloropropane	U	250	U	325	U	6100	U	5880	U	6170
cis-1,2-Dichloroethene	U	250	U	325	U	6100	U	5880	U	6170
Chloroform	U	250	U	325	U	6100	U	5880	U	6170
1,1-Dichloropropene	U	250	U	325	U	6100	29700	5880	21800000	1540000
1,2-Dichloroethane	U	250	70300	3250	7550	6100	U	5880	U	6170
1,1,1-Trichloroethane	U	250	U	325	U	6100	U	5880	U	6170
Carbon Tetrachloride	U	250	U	325	U	6100	U	5880	12100	6170
Benzene	U	250	15500	3250	U	6100	U	5880	U	6170
Trichloroethene	U	250	U	325	U	6100	U	5880	U	6170
1,2-Dichloropropane	U	250	U	325	U	6100	U	5880	U	6170
Bromodichloromethane	U	250	U	325	U	6100	U	5880	U	6170
Dibromomethane	U	250	U	325	U	6100	U	5880	U	6170
cis-1,3-Dichloropropene	U	250	U	325	U	6100	U	5880	U	6170
trans-1,3-Dichloropropene	U	250	U	325	U	6100	U	5880	U	6170
1,1,2-Trichloroethane	U	250	U	325	U	6100	U	5880	U	6170
1,3-Dichloropropane	U	250	U	325	U	6100	U	5880	U	6170
Dibromochloromethane	U	250	U	325	U	6100	U	5880	U	6170
1,2-Dibromoethane	U	250	U	325	U	6100	U	5880	U	6170
Bromoform	U	250	U	325	U	6100	U	5880	U	6170
4-Methyl-2-pentanone	U	250	U	325	U	6100	U	5880	U	6170
Toluene	U	250	U	325	U	6100	U	5880	U	6170
2-Hexanone	U	250	U	325	U	6100	U	5880	U	6170
Tetrachloroethene	U	250	U	325	U	6100	U	5880	U	6170
Chlorobenzene	U	250	U	325	U	6100	U	5880	U	6170
1,1,1,2-Tetrachloroethane	U	250	U	325	U	6100	U	11800	U	12300
Ethylbenzene	U	500	U	649	U	12200	U	5880	U	6170
p,m-Xylene	U	250	U	325	U	6100	U	5880	U	6170
o-Xylene	U	250	U	325	U	6100	U	5880	U	6170
Styrene	U	250	U	325	U	6100	U	5880	U	6170
Isopropylbenzene	U	250	U	325	U	6100	U	5880	U	6170
1,1,2,2-Tetrachloroethane	U	250	U	325	U	6100	U	5880	U	6170
1,2,3-Trichloropropane	U	250	U	325	U	6100	U	5880	U	6170
n-Propylbenzene	U	250	U	325	U	6100	U	5880	U	6170
Bromobenzene	U	250	U	325	U	6100	U	5880	U	6170
1,3,5-Trimethylbenzene	U	250	U	325	U	6100	U	5880	U	6170
2-Chlorotoluene	U	250	U	325	U	6100	U	5880	U	6170
4-Chlorotoluene	U	250	U	325	U	6100	U	5880	U	6170
tert-Butylbenzene	U	250	U	325	U	6100	U	5880	U	6170
1,2,4-Trimethylbenzene	U	250	U	325	U	6100	U	5880	U	6170
sec-Butylbenzene	U	250	U	325	U	6100	U	5880	U	6170
p-Isopropyltoluene	U	250	U	325	U	6100	U	5880	U	6170
1,3-Dichlorobenzene	U	250	U	325	U	6100	U	5880	U	6170
1,4-Dichlorobenzene	U	250	U	325	U	6100	U	5880	U	6170
n-Butylbenzene	U	250	U	325	U	6100	U	5880	U	6170
1,2-Dichlorobenzene	U	250	U	325	U	6100	U	5880	U	6170
1,2-Dibromo-3-chloropropane	U	250	U	325	U	6100	U	5880	U	6170
1,2,4-Trichlorobenzene	U	250	U	325	U	6100	U	5880	U	6170
Hexachlorobutadiene	U	250	U	325	U	6100	U	5880	U	6170
Naphthalene	U	250	U	325	U	6100	U	5880	U	6170
1,2,3-Trichlorobenzene	U	250	U	325	U	6100	U	5880	U	6170

rv\_2356

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Sample No	MeOH Blank A 090706;1		06400		23896	
	SB030-17.5		SB030-15			
Location:	50		1400		1000	
Dilution Factor	100		1:2		83	
Percent Solids						
Analyte	Result µg/L	RL µg/Kg	Result µg/Kg	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	250	U	6100	U	6020
Chloromethane	U	250	U	6100	U	6020
Vinyl Chloride	U	250	U	6100	U	6020
Bromomethane	U	250	U	6100	U	6020
Chloroethane	U	250	U	6100	U	6020
Trichlorofluoromethane	U	250	U	6100	U	24100
Acetone	U	1000	U	24400	U	6020
1,1-Dichloroethene	U	250	U	6100	2930 J	6020
Methylene Chloride	U	250	U	6100	U	6020
Carbon Disulfide	U	250	U	6100	U	6020
Methyl-t-butyl Ether	U	250	U	6100	U	6020
trans-1,2-Dichloroethene	U	250	U	6100	U	6020
1,1-Dichloroethane	U	250	U	6100	U	6020
2-Butanone	U	250	U	6100	U	6020
2,2-Dichloropropane	U	250	U	6100	U	6020
cis-1,2-Dichloroethene	U	250	U	6100	U	6020
Chloroform	U	250	U	6100	U	6020
1,1-Dichloropropene	U	250	U	6100	U	6020
1,2-Dichloroethane	U	250	69500	6100	133000 J	6020
1,1,1-Trichloroethane	U	250	U	6100	U	6020
Carbon Tetrachloride	U	250	U	6100	U	6020
Benzene	U	250	U	6100	U	6020
Trichloroethene	U	250	U	6100	U	6020
1,2-Dichloropropane	U	250	U	6100	U	6020
Bromodichloromethane	U	250	U	6100	U	6020
Dibromomethane	U	250	U	6100	U	6020
cis-1,3-Dichloropropene	U	250	U	6100	U	6020
trans-1,3-Dichloropropene	U	250	U	6100	U	6020
1,1,2-Trichloroethane	U	250	U	6100	U	6020
1,3-Dichloropropane	U	250	U	6100	U	6020
Dibromochloromethane	U	250	U	6100	U	6020
1,2-Dibromoethane	U	250	U	6100	U	6020
Bromoform	U	250	U	6100	U	6020
4-Methyl-2-pentanone	U	250	U	6100	U	6020
Toluene	U	250	U	6100	U	6020
2-Hexanone	U	250	U	6100	U	6020
Tetrachloroethene	U	250	U	6100	U	6020
Chlorobenzene	U	250	U	6100	U	6020
1,1,1,2-Tetrachloroethane	U	250	U	6100	U	6020
Ethylbenzene	U	500	U	12200	U	1200
p&m-Xylene	U	250	U	6100	U	6020
o-Xylene	U	250	U	6100	U	6020
Styrene	U	250	U	6100	U	6020
Isopropylbenzene	U	250	U	6100	U	6020
1,1,2,2-Tetrachloroethane	U	250	U	6100	U	6020
1,2,3-Trichloropropane	U	250	U	6100	U	6020
n-Propylbenzene	U	250	U	6100	U	6020
Bromobenzene	U	250	U	6100	U	6020
1,3,5-Trimethylbenzene	U	250	U	6100	U	6020
2-Chlorotoluene	U	250	U	6100	U	6020
4-Chlorotoluene	U	250	U	6100	U	6020
tert-Butylbenzene	U	250	U	6100	U	6020
1,2,4-Trimethylbenzene	U	250	U	6100	U	6020
sec-Butylbenzene	U	250	U	6100	U	6020
p-Isopropyltoluene	U	250	U	6100	U	6020
1,3-Dichlorobenzene	U	250	U	6100	U	6020
1,4-Dichlorobenzene	U	250	U	6100	U	6020
n-Butylbenzene	U	250	U	6100	U	6020
1,2-Dichlorobenzene	U	250	U	6100	U	6020
1,2-Dibromo-3-chloropropane	U	250	U	6100	U	6020
1,2,4-Trichlorobenzene	U	250	U	6100	U	6020
Hexachlorobutadiene	U	250	U	6100	U	6020
Naphthalene	U	250	U	6100	U	6020
1,2,3-Trichlorobenzene	U	250	U	6100	U	6020

PL-2557

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

Method: REAC SOP 1807

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Sample No	MeOH Blank A 090706-3		00388	
Location:			SB032-16.5	
Dilution Factor	50		5000	
Percent Solids	100		80	
Analyte	Result µg/L	RL µg/Kg	Result µg/Kg	RL µg/Kg
Dichlorodifluoromethane	U	250	U	31300
Chloromethane	U	250	U	31300
Vinyl Chloride	U	250	U	31300
Bromomethane	U	250	U	31300
Chloroethane	U	250	U	31300
Trichlorofluoromethane	U	250	U	31300
Acetone	U	1000	U	125000
1,1-Dichloroethene	U	250	U	31300
Methylene Chloride	U	250	U	31300
Carbon Disulfide	U	250	U	31300
Methyl-t-butyl Ether	U	250	U	31300
trans-1,2-Dichloroethene	U	250	U	31300
1,1-Dichloroethane	U	250	U	31300
2-Butanone	U	250	U	31300
2,2-Dichloropropane	U	250	U	31300
cis-1,2-Dichloroethene	U	250	U	31300
Chloroform	U	250	U	31300
1,1-Dichloropropene	U	250	U	31300
1,2-Dichloroethane	U	250	U	31300
1,1,1-Trichloroethane	U	250	689000	31300
Carbon Tetrachloride	U	250	U	31300
Benzene	U	250	U	31300
Trichloroethene	U	250	U	31300
1,2-Dichloropropane	U	250	U	31300
Bromodichloromethane	U	250	U	31300
Dibromomethane	U	250	U	31300
cis-1,3-Dichloropropene	U	250	U	31300
trans-1,3-Dichloropropene	U	250	U	31300
1,1,2-Trichloroethane	U	250	U	31300
1,3-Dichloropropane	U	250	U	31300
Dibromochloromethane	U	250	U	31300
1,2-Dibromoethane	U	250	U	31300
Bromoform	U	250	U	31300
4-Methyl-2-pentanone	U	250	U	31300
Toluene	U	250	U	31300
2-Hexanone	U	250	U	31300
Tetrachloroethene	U	250	U	31300
Chlorobenzene	U	250	U	31300
1,1,1,2-Tetrachloroethane	U	250	U	31300
Ethylbenzene	U	250	U	31300
p&m-Xylene	U	500	U	62500
o-Xylene	U	250	U	31300
Styrene	U	250	U	31300
Isopropylbenzene	U	250	U	31300
1,1,2,2-Tetrachloroethane	U	250	U	31300
1,2,3-Trichloropropane	U	250	U	31300
n-Propylbenzene	U	250	U	31300
Bromobenzene	U	250	U	31300
1,3,5-Trimethylbenzene	U	250	U	31300
2-Chlorotoluene	U	250	U	31300
4-Chlorotoluene	U	250	U	31300
tert-Butylbenzene	U	250	U	31300
1,2,4-Trimethylbenzene	U	250	U	31300
sec-Butylbenzene	U	250	U	31300
p-Isopropyltoluene	U	250	U	31300
1,3-Dichlorobenzene	U	250	U	31300
1,4-Dichlorobenzene	U	250	U	31300
n-Butylbenzene	U	250	U	31300
1,2-Dichlorobenzene	U	250	U	31300
1,2-Dibromo-3-chloropropane	U	250	U	31300
1,2,4-Trichlorobenzene	U	250	U	31300
hexachlorobutadiene	U	250	U	31300
Naphthalene	U	250	U	31300
1,2,3-Trichlorobenzene	U	250	U	31300

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Method: REAC SOP 1807												
	MeOH Blank A 090806-2		00366 SB029-19		00383 SB030-20		00390 SB031-19.5		00389 SB032-15			
Sample No	50		1000		50		500		50			
Location:	100		80		86		83		82			
Dilution Factor												
Percent Solids												
	Result µg/L	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		
Analyte												
Dichlorodifluoromethane	U	250	U	6250	U	291	U	3010	U	305		
Chloromethane	U	250	U	6250	U	291	U	3010	U	305		
Vinyl Chloride	U	250	U	6250	U	291	U	3010	U	305		
Bromomethane	U	250	U	6250	U	291	U	3010	U	305		
Chloroethane	U	250	U	6250	U	291	U	3010	U	305		
Trichlorofluoromethane	U	1000	R	25000	R	1160	R	12000	R	1220		
Acetone	U	250	4050	6250	173	J	291	U	3010	82.3	J	305
1,1-Dichloroethene	U	250	U	6250	151	J	291	U	3010	165	J	305
Methylene Chloride	U	250	U	6250	U	291	U	3010	U	305		
Carbon Disulfide	U	250	U	6250	U	291	U	3010	U	305		
Methyl-t-butyl Ether	U	250	U	6250	U	291	U	3010	U	305		
trans-1,2-Dichloroethene	U	250	U	6250	U	291	U	3010	U	305		
1,1-Dichloroethane	U	250	U	6250	U	291	U	3010	U	305		
2-Butanone	U	250	U	6250	U	291	U	3010	U	305		
2,2-Dichloropropane	U	250	U	6250	U	291	U	3010	U	305		
cis-1,2-Dichloroethene	U	250	U	6250	U	291	U	3010	U	305		
Chloroform	U	250	U	6250	U	291	U	3010	U	305		
1,1-Dichloropropene	U	250	U	6250	U	291	U	3010	U	305		
1,2-Dichloroethane	U	250	340000	J	106000	4920	291	24100	3010	3430	305	
1,1,1-Trichloroethane	U	250	U	6250	U	291	U	3010	U	305		
Carbon Tetrachloride	U	250	U	6250	U	291	U	3010	U	305		
Benzene	U	250	U	6250	177	J	291	U	3010	461	305	
Trichloroethene	U	250	U	6250	U	291	U	3010	U	305		
1,2-Dichloropropane	U	250	U	6250	U	291	U	3010	U	305		
Bromodichloromethane	U	250	U	6250	U	291	U	3010	U	305		
Dibromomethane	U	250	U	6250	U	291	U	3010	U	305		
cis-1,3-Dichloropropene	U	250	U	6250	U	291	U	3010	U	305		
trans-1,3-Dichloropropene	U	250	U	6250	U	291	U	3010	U	305		
1,1,2-Trichloroethane	U	250	U	6250	U	291	U	3010	U	305		
1,3-Dichloropropane	U	250	U	6250	U	291	U	3010	U	305		
Dibromochloromethane	U	250	U	6250	U	291	U	3010	U	305		
1,2-Dibromoethane	U	250	U	6250	U	291	U	3010	U	305		
Bromoform	U	250	U	6250	U	291	U	3010	U	305		
4-Methyl-2-pentanone	U	250	U	6250	U	291	U	3010	U	305		
Toluene	U	250	U	6250	U	291	U	3010	U	305		
2-Hexanone	U	250	U	6250	U	291	U	3010	U	305		
Tetrachloroethene	U	250	U	6250	U	291	U	3010	U	305		
Chlorobenzene	U	250	U	6250	U	291	U	3010	U	305		
1,1,1,2-Tetrachloroethane	U	250	U	6250	U	291	U	6020	U	610	305	
Ethylbenzene	U	500	U	12500	U	581	U	3010	U	305		
p&m-Xylene	U	250	U	6250	U	291	U	3010	U	305		
o-Xylene	U	250	U	6250	U	291	U	3010	U	305		
Styrene	U	250	U	6250	U	291	U	3010	U	305		
Isopropylbenzene	U	250	U	6250	U	291	U	3010	U	305		
1,1,2,2-Tetrachloroethane	U	250	U	6250	U	291	U	3010	U	305		
1,2,3-Trichloropropane	U	250	U	6250	U	291	U	3010	U	305		
n-Propylbenzene	U	250	U	6250	U	291	U	3010	U	305		
Bromobenzene	U	250	U	6250	U	291	U	3010	U	305		
1,3,5-Trimethylbenzene	U	250	U	6250	U	291	U	3010	U	305		
2-Chlorotoluene	U	250	U	6250	U	291	U	3010	U	305		
4-Chlorotoluene	U	250	U	6250	U	291	U	3010	U	305		
tert-Butylbenzene	U	250	U	6250	U	291	U	3010	U	305		
1,2,4-Trimethylbenzene	U	250	U	6250	U	291	U	3010	U	305		
sec-Butylbenzene	U	250	U	6250	U	291	U	3010	U	305		
p-Isopropyltoluene	U	250	U	6250	U	291	U	3010	U	305		
1,3-Dichlorobenzene	U	250	U	6250	U	291	U	3010	U	305		
1,4-Dichlorobenzene	U	250	U	6250	U	291	U	3010	U	305		
n-Butylbenzene	U	250	U	6250	U	291	U	3010	U	305		
1,2-Dichlorobenzene	U	250	U	6250	U	291	U	3010	U	305		
1,2-Dibromo-3-chloropropane	U	250	U	6250	U	291	U	3010	U	305		
1,2,4-Trichlorobenzene	U	250	U	6250	U	291	U	3010	U	305		
Hexachlorobutadiene	U	250	U	6250	U	291	U	3010	U	305		
Naphthalene	U	250	U	6250	U	291	U	3010	U	305		
1,2,3-Trichlorobenzene	U	250	U	6250	U	291	U	3010	U	305		

Table 1.2 (cont.) Results of the Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Method: REAC SOP 1807

Method: REAC SOP 1807		MeOH Blank A 090806-2		00386 SB032-19		00387 SB033-12.5		00385 SB033-18.5		00384 SB033-19.5	
Sample No											
Location:		50		100		50		1000		100	
Dilution Factor		100		81		82		81		84	
Percent Solids											
Analyte	Result µg/L	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	Result µg/Kg
											595
Dichlorodifluoromethane	U	250	U	617	U	305	U	6170	U		595
Chloromethane	U	250	U	617	U	305	U	6170	U		595
Vinyl Chloride	U	250	U	617	U	305	U	6170	U		595
Bromomethane	U	250	U	617	U	305	U	6170	U		595
Chloroethane	U	250	U	617	U	305	U	6170	U		595
Trichlorofluoromethane	U	1000	R	2470	R	1220	R	24700	R		2380
Acetone	U	250	494	J	617	U	305	U	6170	U	595
1,1-Dichloroethene	U	250	U	617	159	J	305	U	6170	U	595
Methylene Chloride	U	250	U	617	U	305	U	6170	U		595
Carbon Disulfide	U	250	U	617	U	305	U	6170	U		595
Methyl-t-butyl Ether	U	250	U	617	U	305	U	6170	U		595
trans-1,2-Dichloroethene	U	250	U	617	U	305	U	6170	U		595
1,1-Dichloroethane	U	250	U	617	U	305	U	6170	U		595
2-Butanone	U	250	U	617	U	305	U	6170	U		595
2,2-Dichloropropane	U	250	U	617	U	305	U	6170	U		595
cis-1,2-Dichloroethene	U	250	U	617	U	305	U	6170	U		595
Chloroform	U	250	U	617	U	305	U	6170	U		595
1,1-Dichloropropene	U	250	U	617	U	305	U	6170	U		595
1,2-Dichloroethane	U	250	13300	617	3090	305	121000	J	6170	13100	595
1,1,1-Trichloroethane	U	250	U	617	U	305	U	6170	U		595
Carbon Tetrachloride	U	250	U	617	U	305	U	6170	454	J	595
Benzene	U	250	699	617	669	305	U	6170	U		595
Trichloroethene	U	250	U	617	U	305	U	6170	U		595
1,2-Dichloropropane	U	250	U	617	U	305	U	6170	U		595
Bromodichloromethane	U	250	U	617	U	305	U	6170	U		595
Dibromomethane	U	250	U	617	U	305	U	6170	U		595
cis-1,3-Dichloropropene	U	250	U	617	U	305	U	6170	U		595
trans-1,3-Dichloropropene	U	250	U	617	U	305	U	6170	U		595
1,1,2-Trichloroethane	U	250	U	617	U	305	U	6170	U		595
1,3-Dichloropropane	U	250	U	617	U	305	U	6170	U		595
Dibromochloromethane	U	250	U	617	U	305	U	6170	U		595
1,2-Dibromoethane	U	250	U	617	U	305	U	6170	U		595
Bromoform	U	250	U	617	U	305	U	6170	U		595
4-Methyl-2-pentanone	U	250	U	617	U	305	U	6170	U		595
Toluene	U	250	U	617	U	305	U	6170	U		595
2-Hexanone	U	250	U	617	U	305	U	6170	U		595
Tetrachloroethene	U	250	U	617	U	305	U	6170	U		595
Chlorobenzene	U	250	U	617	U	305	U	6170	U		595
1,1,1,2-Tetrachloroethane	U	250	U	617	U	305	U	12300	U		1190
Ethylbenzene	U	500	U	1230	U	610	U	6170	U		595
p&m-Xylene	U	250	U	617	U	305	U	6170	U		595
o-Xylene	U	250	U	617	U	305	U	6170	U		595
Styrene	U	250	U	617	U	305	U	6170	U		595
Isopropylbenzene	U	250	U	617	U	305	U	6170	U		595
1,1,2,2-Tetrachloroethane	U	250	U	617	U	305	U	6170	U		595
1,2,3-Trichloropropane	U	250	U	617	U	305	U	6170	U		595
n-Propylbenzene	U	250	U	617	U	305	U	6170	U		595
Bromobenzene	U	250	U	617	U	305	U	6170	U		595
1,3,5-Trimethylbenzene	U	250	U	617	U	305	U	6170	J		595
2-Chlorotoluene	U	250	U	617	U	305	U	6170	U		595
4-Chlorotoluene	U	250	U	617	U	305	U	6170	U		595
tert-Butylbenzene	U	250	U	617	U	305	U	6170	U		595
1,2,4-Tnmethylbenzene	U	250	U	617	U	305	U	6170	U		595
sec-Butylbenzene	U	250	U	617	U	305	U	6170	U		595
p-Isopropyltoluene	U	250	U	617	U	305	U	6170	U		595
1,3-Dichlorobenzene	U	250	U	617	U	305	U	6170	U		595
1,4-Dichlorobenzene	U	250	U	617	U	305	U	6170	U		595
n-Butylbenzene	U	250	U	617	U	305	U	6170	U		595
1,2-Dichlorobenzene	U	250	U	617	U	305	U	6170	U		595
1,2-Dibromo-3-chloropropane	U	250	U	617	U	305	U	6170	J		595
1,2,4-Trichlorobenzene	U	250	U	617	U	305	U	6170	J		595
Hexachlorobutadiene	U	250	U	617	U	305	U	6170	U		595
Naphthalene	U	250	U	617	U	305	U	6170	U		595
1,2,3-Trichlorobenzene	U	250	U	617	U	305	U	6170	U		595

v\_2360



Table 2.1 Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Water  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

Analysis Date 09/09/06  
Matrix Water

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5716D	Cal Check Area	327801	2365770	1435140			
BV5718.D	Water Blank B090906-2	316555	2316266	1375335	104	100	98
BV5719.D	LCS BW 41	316158	2332374	1392383	105	98	98
BV5721.D	15185/100x	316995	2279489	1346873	106	100	100
BV5723.D	15188	310085	2235111	1339016	106	100	99
BV5724.D	15188 MS	315411	2269002	1355622	104	99	99
BV5725.D	15188 MSD	314540	2287550	1374456	105	99	99
BV5726.D	15193	313018	2250749	1341385	105	100	99
BV5730.D	15190/100x	306377	2238030	1336510	105	100	100
BV5731.D	15185/1000x	307988	2245679	1347883	105	99	100

isv1305

Analysis Date 09/11/06  
Matrix Water

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5745D	Cal Check Area	367634	2666120	1592960			
BV5748.D	Water Blank B091106-1	348964	2607075	1538289	101	102	98
BV5751.D	15174	334445	2461051	1456389	103	102	99
BV5752.D	15175	325491	2400405	1434207	103	101	98

isv1306

Analysis Date 09/12/06  
Matrix Water

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5757D	Cal Check Area	328734	2395330	1469990			
BV5760.D	Water Blank B091206-2	313998	2334973	1395797	106	101	99
BV5763.D	15189/2x	311039	2295940	1384626	105	101	98

isv 1308

#### Internal Standards

IS 1= Bromochloromethane  
IS 2= 1,4-Difluorobenzene  
IS 3= Chlorobenzene-d5

#### Surrogate Standards

Surr. 1= 1,2-Dichloroethane-d4  
Surr. 2= Toluene-d8  
Surr. 3= p-Bromofluorobenzene

Limits  
Water  
76 - 114  
88 - 110  
86 - 115



Table 2. 2 Results of the LCS Analysis for VOC in Water  
 WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

Sample ID: LCS BW 41

Analyte	LCS Spike Added µg/L	LCS Result µg/L	LCS % Recovery	QC Limits % Recovery
1,1-Dichloroethene	50.0	56.2	112	70 - 130
Benzene	50.0	51.0	102	70 - 130
Trichloroethene	50.0	51.8	104	70 - 130
Toluene	50.0	51.1	102	70 - 130
Chlorobenzene	50.0	50.4	101	70 - 130

Table 2.3 Results of MS/MSD Analysis for VOC in Water  
 WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
 Results Based on Dry Weight

Sample No. : 15188

Analyte	Sample Result µg/L	MS Spike Added µg/L	MSD Spike Added µg/L	MS Result µg/L	MSD Result µg/L	MS % Rec.	MSD % Rec.	RPD	QC Limits % Recovery RPD	
1,1-Dichloroethene	2.1	50.0	50.0	57.6	58.1	111	112	1	61 - 145	14
Benzene	U	50.0	50.0	52.3	50.7	105	101	3	76 - 127	11
Trichloroethene	U	50.0	50.0	54.2	55.4	108	111	2	71 - 120	14
Toluene	U	50.0	50.0	52.2	51.0	104	102	2	76 - 125	11
Chlorobenzene	U	50.0	50.0	52.0	50.6	104	101	3	75 - 130	11

msv 809

Table 2.4 Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

Page 1 of 1

Analysis Date 09/11/06  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5745.D	Cal Check Area	367634	2666120	1592960			
BV5749.D	MeOH Blank B091106-1	346370	2582597	1526536	102	102	98
BV5750.D	LCS BM 04	339326	2525871	1501388	102	101	98
BV5754.D	04109/100x	301207	2223638	1356110	103	100	101
BV5755.D	10190/100x	296810	2210361	1362966	104	99	101

isv1307

Analysis Date 09/12/06  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5757.D	Cal Check Area	328734	2395330	1469990			
BV5759.D	MeOH Blank B091206-1	322916	2350873	1414796	105	101	99
BV5761.D	LCS BM 05	315276	2318658	1398043	104	100	99
BV5764.D	04111/100x	394083	2158899	1339456	104	99	102
BV5765.D	04113/500x	306617	2268507	1384481	105	100	99
BV5766.D	04114/500x	308055	2307145	1397350	105	101	99
BV5767.D	04111/100x ms	387079	2154620	1335051	103	99	102
BV5768.D	04111/100x msd	388464	2179540	1331915	104	100	103
BV5769.D	04113/500x ms	310089	2314606	1414350	104	100	100
BV5770.D	04113/500 x msd	307763	2318240	1405399	105	100	99
BV5771.D	04116/2000x	312133	2290419	1376817	105	101	100
BV5772.D	10193/500x	306765	2271950	1382306	105	101	100
BV5773.D	04115/5000x	307914	2265419	1374649	106	100	100

isv1309

Analysis Date 09/12/06  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5777.D	Cal Check Area	320490	2335860	1426210			
BV5779.D	MeOH Blank B091206-4	315559	2286315	1359567	103	102	100
BV5780.D	10191/500x	307895	2243459	1362227	104	101	101
BV5781.D	10192/1000x	308882	2250057	1356406	104	101	101
BV5782.D	22409/25000x	303448	2214547	1338097	106	101	101
BV5783.D	22428/100x	279683	2086851	1291542	105	99	103
BV5784.D	23899/20000x	303110	2218923	1339841	105	101	100
BV5785.D	15159/500x	300712	2200495	1346278	106	100	100
BV5787.D	15158/200x	297260	2160471	1329841	105	100	103
BV5788.D	23898/100x	273600	2042777	1256175	106	100	105
BV5790.D	15156/20000x	306666	2214793	1327627	106	101	101
BV5791.D	15160/10000x	296465	2190202	1322583	107	101	101
BV5792.D	15167/100x	274504	2034964	1259166	105	100	104
BV5793.D	15178/5000x	294809	2148711	1306033	105	101	101

isv1310

Internal Standards

IS 1= Bromochloromethane.  
IS 2= 1,4-Difluorobenzene  
IS 3= Chlorobenzene-d5

Surrogate Standards

Surr. 1= 1,2-Dichloroethane-d4  
Surr. 2= Toluene-d8  
Surr. 3= p-Bromofluorobenzene

Limits

Soil  
70-121  
34-138  
59-113

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

Page 2 of 11

Analysis Date 09/12/06  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV5020D	Cal Check Area	214729	1393827	784386			
AV5024.D	Soil Blank A091206-4	179799	1238902	658698	111	104	88
AV5025.D	LCS AS 32	171554	1222437	655071	114	103	86
AV5026.D	04108	150478	1077363	578894	118	104	84
AV5029.D	04110/5x	152374	1064695	577965	121	104	84
AV5033.D	15157/10x	140947	984213	539993	127 *	105	80
AV5034.D	15179/5x	140057	955243	533283	123 *	104	83
AV5035.D	15177/2x	118320	783900	436321	124 *	105	78

isv1311

Analysis Date 09/13/06  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV5039D	Cal Check Area	160886	1081630	646716			
AV5041.D	Soil Blank A 091306-2	149690	1058045	578481	119	105	84
AV5042.D	04112/2x	101836	664400	370018	122 *	102	81
AV5043.D	04112/2x ms	147349	1058454	591295	124 *	101	82
AV5044.D	04112/2x msd	145776	1059099	587633	125 *	102	82
AV5045.D	15157/10x	142974	992384	552186	126 *	103	81
AV5046.D	15179/5x	138488	948860	531995	125 *	104	82
AV5047.D	15177/2x	134839	940737	527767	124 *	104	79

isv1312

Analysis Date 09/13/06  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5795D	Cal Check Area	305775	2233380	1412210			
BV5796.D	MeOH Blank B091306-1	305152	2251573	1371849	107	100	97
BV5797.D	15168/500x	297835	2210206	1360424	108	100	98
BV5798.D	15154/500x	298376	2202550	1367092	108	100	97
BV5799.D	15168/500 x ms	294621	2223478	1381999	109	99	97
BV5800.D	15168/500x msd	296448	2217635	1379077	108	99	97
BV5801.D	04114/1000x	294712	2209324	1355968	109	100	97
BV5802.D	15194/4000x	296339	2177701	1344778	109	100	97
BV5803.D	15158/500x	295630	2237108	1380779	108	100	96
BV5804.D	23898/500x	301090	2242915	1394750	109	100	97
BV5805.D	15155/20000x	295869	2196651	1347408	108	100	97

isv1313

Internal Standards	Surrogate Standards	Limits
IS 1= Bromochloromethane	Surr. 1= 1,2-Dichloroethane-d4	Soil 70-121
IS 2= 1,4-Difluorobenzene	Surr. 2= Toluene-d8	84-138
IS 3= Chlorobenzene-d5	Surr. 3= p-Bromofluorobenzene	59-113

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

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Analysis Date 09/15/06  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV5068.D	Cal Check Area	145861	933651	580872			
AV5070.D	Soil Blank A091506-2	136346	954204	533168	98	108	101
AV5071.D	15180/10x	135221	923369	509082	99	109	97
AV5072.D	15166	129410	906176	498239	97	108	100
AV5073.D	15153/2x	128427	888248	493889	98	108	100
AV5074.D	15161	118966	854338	463378	97	110	100
AV5076.D	15163	115119	800368	432027	97	111	100
AV5077.D	15164	47035 *	321396 *	176872 *	99	108	99
AV5078.D	15165	115203	803320	439851	96	109	100
AV5083.D	15162/10x	111564	769280	424590	98	109	103
AV5085.D	15164	59301 *	405543 *	222288 *	99	109	102

isv1316

Analysis Date 060825  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5315.D	Cal Check Area	168464	1403110	894290			
BV5318.D	Soil Blank B 082506-2	162459	1401174	826544	109	102	86
BV5319.D	LCS-BS-94	157045	1455203	846483	109	102	83
BV5320.D	04131	151772	1265580	723882	107	106	79
BV5321.D	04131 ms	141965	1336090	745767	107	106	80
BV5322.D	04131 msd	131225	1302049	694324	103	109	76
BV5323.D	04182	141210	1103151	472327	105	126	61
BV5324.D	04183	141711	1189497	682612	104	107	82
BV5325.D	04184	141050	1235204	729286	105	104	82
BV5326.D	04185	161208	1333659	850192	107	99	83
BV5327.D	04186	161038	1372970	870055	106	98	85
BV5328.D	04187	141893	1314663	810218	107	102	83
BV5329.D	04188	141171	1333134	823351	108	106	83

isv1273

Internal Standards	Surrogate Standards	Limits
IS 1= Bromochloromethane	Surr. 1= 1,2-Dichloroethane-d4	Soil
IS 2= 1,4-Difluorobenzene	Surr. 2= Toluene-d8	70-121
IS 3= Chlorobenzene-d5	Surr. 3= p-Bromofluorobenzene	84-138
		59-113

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil  
WA# 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

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Analysis Date	060826						
Matrix	Soil						
File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5333.D	Cal Check Area	167493	1402160	870301			
BV5335.D	Soil Blank B 082606-2	158872	1355769	794482	110	102	86
BV5336.D	04198	176663	1516310	903772	110	109	85
BV5337.D	04199	165178	1428827	771653	105	111	78
BV5338.D	04200	153644	1367444	751247	105	109	79
BV5339.D	15134	162342	1349361	772833	110	104	82
BV5340.D	15154	152498	1209291	666972	107	109	80
BV5341.D	15154 ms	133664	1286814	714462	106	106	81
BV5342.D	15154 msd	139562	1321332	732609	103	106	80
BV5343.D	15155	135419	1130654	634042	106	108	80
BV5344.D	15156	135001	1049378	597077	109	108	81
BV5345.D	15157	141730	1159485	670255	108	106	82
BV5346.D	15158	144300	1200708	709213	105	111	80
BV5347.D	15159	136466	1165290	666731	108	107	82
BV5348.D	15160	139495	1168444	580787	112	105	82

isv1274

Analysis Date	060826						
Matrix	Soil						
File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5350.D	Cal Check Area	161226	1336300	848819			
BV5351.D	Soil Blank 082606-1	165225	1417536	808109	108	104	84
BV5352.D	LCS BS 95	160648	1459178	843606	110	102	83
BV5359.D	19162/5x	148215	1309923	753644	112	106	82
BV5360.D	19162/5x MS	132395	1352325	755543	109	105	80
BV5361.D	19162/5x MSD	123594	1281239	705406	108	106	81
BV5362.D	19163/5x	153437	1311190	765938	111	104	82
BV5364.D	19164/5x	135401	1270259	712901	111	108	79
BV5365.D	19165/5x	148742	1291014	750593	112	105	83
BV5366.D	04181/5x	155638	1302840	762099	111	105	83
BV5353.D	04182/10x	171935	1361594	771025	107	106	79
BV5354.D	04184/10x	166831	1346193	797131	106	104	83
BV5355.D	04200/10x	158034	1341862	169593	110	106	82
BV5356.D	19154/5x	160927	1292536	734155	106	107	80
BV5358.D	19158/5x	161568	1297647	751085	105	108	81

isv1275

Internal Standards	Surrogate Standards	Limits Soil
IS 1= Bromochloromethane	Surr. 1= 1,2-Dichloroethane-d4	70-121
IS 2= 1,4-Difluorobenzene	Surr. 2= Toluene-d8	84-138
IS 3= Chlorobenzene-d5	Surr. 3= p-Bromofluorobenzene	59-113

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil  
WAW J-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

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Analysis Date	060827						
Matrix	Soil						
File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5370.D	Cal Check Area	155659	1404140	832393			
BV5372.D	Soil Blank B 082706-2	150489	1401067	811309	110	103	84
BV5373.D	19169	140491	1240552	705735	111	106	81
BV5375.D	19168/5x	145362	1287291	741337	111	105	81
BV5376.D	19170/5x	142097	1256753	690805	113	110	77
BV5377.D	15135/10x	130537	1166498	652007	112	109	77
BV5378.D	15137/10x	130422	1284840	757930	111	104	87
BV5379.D	15138/5x	132674	1160562	670718	115	106	80
BV5380.D	23733/5x	136458	1454732	861073	111	105	87
BV5381.D	23734/5x	140910	1425991	801729	109	104	86
BV5382.D	23736/5x	149274	1320600	756953	111	105	83
BV5383.D	23879/5x	143331	1327217	793561	116	106	87
BV5384.D	23870/5x	141383	1400998	791641	109	105	84
BV5385.D	23876/5x	144902	1316279	747913	108	105	82

isv1276

Analysis Date	060827						
Matrix	Soil						
File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5391.D	Cal Check Area	161067	1464310	903965			
BV5392.D	soil blank B 082706-3	161702	1513526	859073	105	104	85
BV5393.D	19161/10x	164993	1361954	711551	107	111	72
BV5395.D	04197/5x	135923	1276253	722807	109	105	81
BV5397.D	23875/5x	145402	1300784	751584	113	105	81
BV5398.D	23877/5x	142433	1313392	751505	115	106	82
BV5399.D	23739/5x	152230	1336639	778526	113	104	81
BV5400.D	23873/5x	154398	1347966	766617	115	105	81
BV5401.D	23737/5x	148457	1294647	735281	115	105	82
BV5402.D	23738/5x	131381	1234677	703509	112	107	79
BV5403.D	23882/5x	153259	1340449	802392	113	106	82
BV5404.D	23883/5x	148296	1281238	753792	113	105	82
BV5406.D	23878/5x	138273	1141751	539091	105	122	65
BV5407.D	23881/5x	152202	1584288	984366	125	97	87
BV5408.D	23880/5x	180200	1715215	916623	99	109	92

isv1278

Internal Standards	Surrogate Standards	Limits
IS 1= Bromochloromethane	Surr. 1= 1,2-Dichloroethane-d4	Soil
IS 2= 1,4-Difluorobenzene	Surr. 2= Toluene-d8	70-121
IS 3= Chlorobenzene-d5	Surr. 3= p-Bromofluorobenzene	84-138
		59-113

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil  
WA# 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

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Analysis Date	060828						
Matrix	Soil						
File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5415.D	Cal Check Area	160543	1348590	849832			
BV5417.D	Soil Blank B082806-2	166776	1380535	820255	110	101	86
BV5418.D	LCS-BS-96	157978	1381938	829620	111	100	84
BV5421.D	23734/10x	143663	1217239	741910	119	101	84
BV5422.D	00398/5x	139032	1163418	711395	118	102	82
BV5423.D	00394/5x	129482	1114389	679040	120	103	86
BV5424.D	00393/5x	137696	1189481	722654	119	101	86
BV5426.D	23888/5x	135488	1158694	699461	116	102	82
BV5427.D	00392/5x	126135	1130799	690512	121	103	83
BV5428.D	00624/5x	132282	1145821	695696	117	102	82
BV5429.D	00396/5x	133794	1206686	798777	122	99	91
BV5430.D	00399/5x	211641	1639859	975737	74	102	102

isv1279

Analysis Date	060830						
Matrix	Soil						
File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5466.D	Cal Check Area	374532	2699000	1461419			
BV5474.D	Soil Blank B 083006-1	258578	1998888	997354	111	105	83
BV5475.D	23884/5x	254841	1899359	975643	117	103	84
BV5476.D	23884/5x MS	206671	1785453	906904	118	103	82
BV5477.D	23884/5x MSD	198328	1689838	856109	118	103	80

isv1284

Analysis Date	060905						
Matrix	Soil						
File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5466.D	Cal Check Area	286434	2036260	1165800			
BV5634.D	MeOH Blank B 090506-2	296963	2095545	1142265	99	104	99
BV5635.D	00628/100000x	293831	2109604	1139941	98	105	102
BV5636.D	23894/100x	279627	1983098	1120954	99	102	103
BV5637.D	00391/1000x	275257	1935084	1069258	101	103	99

isv1284

Internal Standards	Surrogate Standards	Limits
IS 1= Bromochloromethane	Surr. 1= 1,2-Dichloroethane-d4	Water
IS 2= 1,4-Difluorobenzene	Surr. 2= Toluene-d8	76-114
IS 3= Chlorobenzene-d5	Surr. 3= p-Bromofluorobenzene	88-110
		86-115



Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil  
WA# J-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

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Analysis Date 060826

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV5632 D	Cal Check Area	203188	1484240	826512			
AV4535 D	Methanol blank A081706-1	138209	1497803	792266	108	103	89
AV4537 D	04185/100x	132752	1450100	774928	108	103	87
AV4538 D	04185/100x ms	135875	1505656	815991	109	101	85
AV4539 D	04185/100x msd	211327	1520340	825077	109	100	85
AV4540 D	04186/100x	132627	1442271	790034	108	102	88
AV4541 D	04187/100x	138378	1499829	799430	109	103	86
AV4542 D	04188/100x	137289	1492894	798649	108	103	87
AV4544 D	04199/100x	135683	1499101	801203	110	103	86

ISV1277

Analysis Date 060829  
Matrix: Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4585 D	Cal Check Area	193101	1352880	742665			
AV4586 D	Methanol Blank A 082906-1	194051	1398117	753652	104	102	91
AV4587 D	04185/200x	194620	1430537	751375	106	103	88
AV4588 D	04198/200x	197712	1394847	739677	106	103	89
AV4599 D	23733/50x	197245	1414899	817322	109	98	95
AV4601 D	23879/100x	210598	1539268	865335	104	99	92

ISV1280

Analysis Date 060830  
Matrix: Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4609 D	Cal Check Area	214123	1482035	877838			
AV4611 D	Methanol Blank A 083006-2	201775	1441033	832112	105	98	93
AV4614 D	23875/50x	189115	1382790	795863	109	97	95
AV4615 D	23877/100x	194529	1419323	824150	108	98	94
AV4616 D	23877/100x ms	193127	1446853	841753	107	97	93
AV4617 D	23877/100x msd	194652	1444393	845850	108	96	93
AV4618 D	23739/50x	191553	1397271	807481	109	97	96
AV4619 D	23873/100x	136839	1445154	825531	106	99	93
AV4620 D	23737/50x	188513	1383434	801275	107	97	96
AV4622 D	23882/100x ms	193640	1457799	839547	107	97	94
AV4623 D	23882/100x msd	193938	1454537	836214	106	97	93
AV4624 D	23878/50x	189333	1403972	804714	107	98	96
AV4625 D	23881/50x	192911	1463882	1011627	111	105	104

ISV1281

Internal Standards	Surrogate Standards	Limits
IS 1= Bromochloromethane	Surr. 1= 1,2-Dichloroethane-d4	Water
IS 2= 1,4-Difluorobenzene	Surr. 2= Toluene-d8	76 - 114
IS 3= Chlorobenzene-d5	Surr. 3= p-Bromofluorobenzene	88 - 110
		86 - 115

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil  
 WA# 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

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Analysis Date 060831  
 Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4645.D	Cal Check Area	290096	1983200	1084320			
AV4649.D	Methanol Blank A 083106-2	216001	1540250	866897	108	101	91
AV4650.D	04198/40x	200103	1468348	865791	111	101	101
AV4651.D	23881/10000x	214416	1538275	865297	108	102	93
AV4653.D	23733/10000x	200364	1415540	799379	112	102	95
AV4654.D	00394/50x	190516	1374735	799498	110	100	98
AV4655.D	00394/50x ms	189997	1410025	822837	109	98	99
AV4656.D	00394/50x msd	192489	1439461	838604	111	98	100

ISV1283

Analysis Date 060906  
 Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4837.D	Cal Check Area	224624	1633780	907969			
AV4838.D	MeOH Blank A 090606-1	221580	1648560	887487	105	105	95
AV4842.D	00396/100x	205929	1618842	886717	101	104	98
AV4843.D	00399/500x	233023	1715518	914336	104	106	95
AV4844.D	00399/10000x	224277	1621561	870875	104	106	95

ISV1297

Analysis Date 060907  
 Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4860.D	Cal Check Area	216853	1555470	903098			
AV4861.D	MeOH Blank A 090706-1	217393	1596113	874644	109	104	93
AV4869.D	00628/200000x	203644	1479505	827305	114	104	91
AV4870.D	00391/10000x	202147	1469730	821515	114	104	90

ISV1298

Analysis Date 060827  
 Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4534.D	Cal Check Area	203188	1484240	826512			
AV4535.D	Methanol blank A082706-1	198209	1497803	792256	108	103	89
AV4536.D	LCS AM 08	190350	1433627	782318	109	100	87
AV4547.D	19167/500x	194293	1478141	792360	110	103	86
AV4548.D	19167/10000x	181809	1430158	774964	113	102	86

ISV1277

Internal Standards

IS 1= Bromochloromethane  
 IS 2= 1,4-Difluorobenzene  
 IS 3= Chlorobenzene-d5

Surrogate Standards

Surr. 1= 1,2-Dichloroethane-d4  
 Surr. 2= Toluene-d8  
 Surr. 3= p-Bromofluorobenzene

Limits

Water

76 - 114  
 88 - 110  
 86 - 115

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil  
WA# 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

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Analysis Date 060826  
Matrix Soil

AV4585D	Cal Check Area	135101	1351880	742665			
AV4586.D	Methanol Blank A 082906-1	195051	1398117	753652	104	102	91
AV4590.D	15136/50x	178421	1313252	716299	108	102	90
AV4591.D	15139/50x	144008	1351709	732339	108	102	90
AV4592.D	15140/500x	148637	1362631	723885	107	103	87
AV4593.D	15141/50x	150666	1350138	735611	106	102	86
AV4596.D	23719/5000x	157564	1399208	787152	107	99	89
AV4597.D	23718/5000x	155084	1386148	796842	110	99	89

ISV1280

Analysis Date 060829  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4609D	Cal Check Area	214023	1482035	877838			
AV4611.D	Methanol Blank A 083006-2	201475	1441033	832112	105	98	93
AV4612.D	15142/50x	185254	1369876	796063	108	99	95
AV4613.D	19166/2000x	205967	1464319	826145	108	98	92

isv1281

Analysis Date 060830  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4645D	Cal Check Area	290496	1983200	1084320			
AV4649.D	Methanol Blank A 083106-2	216401	1540250	866897	108	101	91
AV4652.D	23718/250000x	197519	1435143	827072	109	100	98
AV4658.D	23740/500x	213540	1554297	869596	110	102	95

isv1283

Analysis Date 060831  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4661D	Cal Check Area	222940	1542000	912001			
AV4662.D	Water Blank A 083106-1	214840	1582414	889480	109	101	93
AV4663.D	23892	167341	1328530	1115900	130	100	96
AV4664.D	23893	306521	2198611	1188095	95	104	97
AV4665.D	23890	233972	2048080	1169325	106	102	97
AV4666.D	23892/10000x	333807	2387122	1234671	88	105	100
AV4667.D	23887/10000x	323043	2366008	1231636	90	106	101
AV4669.D	23889/100x	320233	2298124	1191956	89	106	102
AV4671.D	23893/100x	295823	2136948	1127157	92	105	101
AV4672.D	23893/100x ms	284581	2021448	1079746	95	104	100
AV4673.D	23893/100x msd	271586	1925974	1036958	97	103	99
AV4674.D	00632/10x	259866	1842528	1004037	101	103	98
AV4675.D	23890/1000x	247116	1724037	956646	103	102	96

isv1285

Internal Standards	Surrogate Standards	Limits
IS 1= Bromochloromethane	Surr. 1= 1,2-Dichloroethane-d4	76-114
IS 2= 1,4-Difluorobenzene	Surr. 2= Toluene-d8	98-110
IS 3= Chlorobenzene-d5	Surr. 3= p-Bromofluorobenzene	96-115

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil  
WA# 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

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Analysis Date 060906  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4837D	Cal Check Area	224624	1633780	907969			
AV4838.D	MeOH Blank A 090606-1	221580	1648560	887487	105	105	95
AV4839.D	LCS AM .09	216296	1612886	880016	105	103	93
AV4841.D	23886/20x	219421	1650028	881979	102	106	97
AV4845.D	00395/10000x	215123	1589273	854849	106	105	95
AV4846.D	23891/100x	214902	1606937	880693	103	105	97
AV4847.D	00625/500x	218758	1598741	862746	106	105	95
AV4848.D	00626/1000x	219011	1607843	867192	107	105	94
AV4849.D	00629/10000x	218582	1619758	874362	107	106	94
AV4850.D	00627/50000x	214095	1554451	847615	107	105	94
AV4851.D	23897/1000x	217436	1603128	856482	109	105	94
AV4852.D	00365/1000x	215521	1573631	849183	108	105	93
AV4853.D	23895/1000x	211252	1537031	837955	108	105	93

isv1297

Analysis Date 060907  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4860D	Cal Check Area	216853	1555470	903098			
AV4861.D	MeOH Blank A 090706-1	217393	1596113	874644	109	104	93
AV4862.D	23886/50x	209749	1541909	853724	108	104	99
AV4863.D	23886/500x	213860	1554208	852311	110	105	93
AV4867.D	00395/100000x	209673	1536821	855425	113	104	91
AV4868.D	23897/50000x	206548	1536536	851969	114	104	91
AV4872.D	00634/1000x	219056	1594435	881059	110	104	90
AV4874.D	00630/1000x	208038	1562083	872845	114	104	89
AV4875.D	00397/1000x	209415	1587340	869308	118	104	91
AV4876.D	00400/1000x	207001	1527196	849910	114	104	90
AV4877.D	23896/1000x	204328	1518300	850744	116	104	89

isv1298

Analysis Date 060907  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4884D	Cal Check Area	228678	1638500	969453			
AV4886.D	MeOH Blank A 090706-3	204777	1476674	834150	114	103	89
AV4889.D	00388/5000x	195767	1429940	815969	119	103	86

isv1299

Internal Standards

IS 1= Bromochloromethane  
IS 2= 1,4-Difluorobenzene  
IS 3= Chlorobenzene-d5

Surrogate Standards

Surr. 1= 1,2-Dichloroethane-d4  
Surr. 2= Toluene-d8  
Surr. 3= p-Bromofluorobenzene

Limits

Water  
76-114  
88-110  
86-115

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil  
WA# 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

Page 11 of 11

Analysis Date 060908  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4897D	Cal Check Area	167929	1191410	707708			
AV4899.D	MeOH Blank A 0030806-2	151855	1135352	620064	111	104	102
AV4900.D	00366/1000x	150049	1110524	607828	117	104	101
AV4901.D	00366/2000x	159705	1092724	600283	116	104	100
AV4902.D	00397/250000x	153138	1065436	595151	117	103	101
AV4904.D	00383/50x	152907	1090834	601655	113	103	107
AV4905.D	00390/500x	159614	1134222	615103	114	104	102
AV4906.D	00388/5000x	156609	1118346	609540	117	104	110
AV4907.D	00389/50x	155693	1117714	606673	111	105	107
AV4908.D	00386/100x	156581	1121657	619723	111	104	106
AV4909.D	00387/50x	155756	1117802	610330	111	104	110
AV4910.D	00385/1000x	152709	1172904	626499	115	104	104
AV4911.D	00384/100x	157222	1118219	615275	113	104	107
AV4912.D	00384/100x ms	159437	1177808	652108	110	102	106
AV4913.D	00384/100x msd	160630	1173739	643202	110	103	107

isv1304

Analysis Date 060909  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4923D	Cal Check Area	200006	1396610	764531			
AV4924.D	MeOH Blank A 0030806-1	195283	1342414	712401	109	100	91
AV4926.D	00385/1000x	175335	1231414	653783	115	100	90

isv1352

Analysis Date 060831  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4677D	Cal Check Area	235159	1630310	953072			
AV4680.D	Water Blank A 083106-3	228190	1609907	900212	107	101	84
AV4681.D	23893/200x	225400	1575492	883746	106	102	95

isv1377

Analysis Date 060830  
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV4632D	Cal Check Area	229714	1601510	955940			
AV4634.D	Water Blank A 083106-3	212140	1508119	861891	110	98	88
AV4635.D	LCS AW 69	201072	1463659	85141	113	96	86

isv1282

Internal Standards

IS 1= Bromochloromethane  
IS 2= 1,4-Difluorobenzene  
IS 3= Chlorobenzene-d5

Surrogate Standards

Surr. 1= 1,2-Dichloroethane-d4  
Surr. 2= Toluene-d8  
Surr. 3= p-Bromofluorobenzene

Limits

Water Soil  
76-114 70-121  
38-110 34-138  
86-115 59-113

Table 2.5 Results of the LCS Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

Page 1 of 3

Sample ID: LCS BM 04

Analyte	LCS Spike Added µg/Kg	LCS Result µg/Kg	LCS % Recovery	QC Limits % Recovery
1,1-Dichloroethene	50.0	47.8	96	70 - 130
Benzene	50.0	48.8	98	70 - 130
Trichloroethene	50.0	48.6	97	70 - 130
Toluene	50.0	49.2	98	70 - 130
Chlorobenzene	50.0	47.7	95	70 - 130

Sample ID: LCS BM 05

Analyte	LCS Spike Added µg/Kg	LCS Result µg/Kg	LCS % Recovery	QC Limits % Recovery
1,1-Dichloroethene	50.0	54.6	109	70 - 130
Benzene	50.0	48.0	96	70 - 130
Trichloroethene	50.0	47.8	96	70 - 130
Toluene	50.0	47.7	95	70 - 130
Chlorobenzene	50.0	47.0	94	70 - 130

Sample ID: LCS AS 32

Analyte	LCS Spike Added µg/Kg	LCS Result µg/Kg	LCS % Recovery	QC Limits % Recovery
1,1-Dichloroethene	50.0	58.5	117	70 - 130
Benzene	50.0	49.4	99	70 - 130
Trichloroethene	50.0	40.5	81	70 - 130
Toluene	50.0	53.2	106	70 - 130
Chlorobenzene	50.0	48.2	96	70 - 130

Table 2.5 (cont.) Results of the LCS Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy

Page 2 of 3

Sample ID: LCS BS 94

Analyte	LCS Spike Added µg/Kg	LCS Result µg/Kg	LCS % Recovery	QC Limits % Recovery
1,1-Dichloroethene	50.0	59.6	51	119 - 130
Benzene	50.0	54.5	49	109 - 130
Trichloroethene	50.0	52.3	49	105 - 130
Toluene	50.0	56.7	51	113 - 130
Chlorobenzene	50.0	54.3	51	109 - 130

Sample ID: LCS BS 95

Analyte	LCS Spike Added µg/Kg	LCS Result µg/Kg	LCS % Recovery	QC Limits % Recovery
1,1-Dichloroethene	50.0	55.7	51	111 - 130
Benzene	50.0	52.7	49	105 - 130
Trichloroethene	50.0	50.3	49	101 - 130
Toluene	50.0	54.6	51	109 - 130
Chlorobenzene	50.0	52.2	51	104 - 130

Sample ID: LCS BS 96

Analyte	LCS Spike Added µg/Kg	LCS Result µg/Kg	LCS % Recovery	QC Limits % Recovery
1,1-Dichloroethene	50.0	54.9	51	110 - 130
Benzene	50.0	53.2	49	106 - 130
Trichloroethene	50.0	50.0	49	100 - 130
Toluene	50.0	52.6	51	105 - 130
Chlorobenzene	50.0	50.7	51	101 - 130

Table 2.5 (cont.) Results of the LCS Analysis for VOC in Soil  
 WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
 Results based on Dry Weight

Page 3 of 3

Sample ID: LCS AM 08

Analyte	LCS Spike Added µg/Kg	LCS Result µg/Kg	LCS % Recovery	QC Limits % Recovery
1,1-Dichloroethene	50.0	62.7	125	70 - 130
Benzene	50.0	57.9	116	70 - 130
Trichloroethene	50.0	55.6	111	70 - 130
Toluene	50.0	56.5	113	70 - 130
Chlorobenzene	50.0	51.4	103	70 - 130

Sample ID: LCS AM 09

Analyte	LCS Spike Added µg/Kg	LCS Result µg/Kg	LCS % Recovery	QC Limits % Recovery
1,1-Dichloroethene	50.0	55.4	111	70 - 130
Benzene	50.0	50.4	101	70 - 130
Trichloroethene	50.0	49.4	99	70 - 130
Toluene	50.0	53.2	106	70 - 130
Chlorobenzene	50.0	51.1	102	70 - 130

Sample ID: LCS AW 69

Analyte	LCS Spike Added µg/Kg	LCS Result µg/Kg	LCS % Recovery	QC Limits % Recovery
1,1-Dichloroethene	50.0	51.1	102	70 - 130
Benzene	50.0	52.2	106	70 - 130
Trichloroethene	50.0	47.5	95	70 - 130
Toluene	50.0	49.3	99	70 - 130
Chlorobenzene	50.0	43.4	87	70 - 130



Table 2.6 Results of MS/MSD Analysis for VOC in Soil  
WA # 0-198 Vastal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

Page 1 of 4

Sample No. : 04112/2x

Analyte	Sample Result µg/kg	MS Spike Added µg/kg	MSD Spike Added µg/kg	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits % Recovery	RPD
1,1-Dichloroethene	U	118	118	187	182	159	155	3	59 - 172	22
Benzene	U	118	118	135	129	115	110	4	66 - 142	21
Trichloroethene	U	118	118	109	102	93	87	6	62 - 137	24
Toluene	U	118	118	137	131	116	111	4	59 - 139	21
Chlorobenzene	U	118	118	125	118	106	101	5	60 - 133	21

msv 805

Sample No. : 04111/100x

Analyte	Sample Result µg/kg	MS Spike Added µg/kg	MSD Spike Added µg/kg	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits % Recovery	RPD
1,1-Dichloroethene	U	5950	5950	5610	5690	94	96	2	59 - 172	22
Benzene	U	5950	5950	5740	5760	96	97	0	66 - 142	21
Trichloroethene	561	5950	5950	6900	6920	106	107	0	62 - 137	24
Toluene	U	5950	5950	5680	5760	95	97	1	59 - 139	21
Chlorobenzene	U	5950	5950	5630	5710	95	96	1	60 - 133	21

msv 806

Sample No. : 04113/500x

Analyte	Sample Result µg/kg	MS Spike Added µg/kg	MSD Spike Added µg/kg	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits % Recovery	RPD
1,1-Dichloroethene	U	30100	30100	27300	28000	91	93	2	59 - 172	22
Benzene	U	30100	30100	29000	29800	96	99	3	66 - 142	21
Trichloroethene	U	30100	30100	29400	30100	98	100	2	62 - 137	24
Toluene	U	30100	30100	28800	29900	96	99	4	59 - 139	21
Chlorobenzene	U	30100	30100	28500	29600	95	98	4	60 - 133	21

msv 807

Sample No. : 15168/500x

Analyte	Sample Result µg/kg	MS Spike Added µg/kg	MSD Spike Added µg/kg	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits % Recovery	RPD
1,1-Dichloroethene	U	30500	30500	30100	30800	119	101	16	59 - 172	22
Benzene	U	30500	30500	31200	30500	102	100	2	66 - 142	21
Trichloroethene	3590	30500	30500	31800	33200	99	97	2	62 - 137	24
Toluene	U	30500	30500	30300	29700	99	98	2	59 - 139	21
Chlorobenzene	U	30500	30500	29700	29200	97	96	2	60 - 133	21

msv 808

Table 2.6 (cont.) Results of MS/MSD Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

Page 2 of 4

Sample No.: 04131

Analyte	Sample Result µg/kg	MS	MSD	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits	
		Spike Added µg/kg	Spike Added µg/kg						% Recovery	RPD
1,1-Dichloroethene	U	53.2	53.2	63.0	67.3	118	127	7	59 - 172	22
Benzene	U	53.2	53.2	55.5	54.2	104	102	3	66 - 142	21
Trichloroethene	44.5	53.2	53.2	120	130	141	160	13	62 - 137	24
Toluene	U	53.2	53.2	60.7	61.8	114	116	2	59 - 139	21
Chlorobenzene	U	53.2	53.2	54.0	52.9	101	99	2	60 - 133	21

msv 810

Sample No: 19162

Analyte	Sample Result µg/kg	MS	MSD	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits	
		Spike Added µg/kg	Spike Added µg/kg						% Recovery	RPD
1,1-Dichloroethene	U	287	287	370	0	129	129	0	59 - 172	22
Benzene	U	287	287	311	301	108	105	3	66 - 142	21
Trichloroethene	14.7	287	287	303	297	100	98	2	62 - 137	24
Toluene	U	287	287	334	331	116	115	1	59 - 139	21
Chlorobenzene	U	287	287	311	0	108	107	1	60 - 133	21

msv 811

Sample No: 23884

Analyte	Sample Result µg/kg	MS	MSD	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits	
		Spike Added µg/kg	Spike Added µg/kg						% Recovery	RPD
1,1-Dichloroethene	U	294	294	435	470	148	160	8	59 - 172	22
Benzene	U	294	294	304	313	103	107	3	66 - 142	21
Trichloroethene	134	294	294	423	413	98	95	3	62 - 137	24
Toluene	U	294	294	325	326	111	113	2	59 - 139	21
Chlorobenzene	U	294	294	292	292	99	101	2	60 - 133	21

msv 812

Sample No: 04185

Analyte	Sample Result µg/kg	MS	MSD	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits	
		Spike Added µg/kg	Spike Added µg/kg						% Recovery	RPD
1,1-Dichloroethene	233	6020	6020	6820	6930	109	111	2	59 - 172	22
Benzene	280	6020	6020	6140	6350	102	105	3	66 - 142	21
Trichloroethene	12900	6020	6020	11300	11800	0	0	NC	62 - 137	24
Toluene	259	6020	6020	6180	6260	98	101	3	59 - 139	21
Chlorobenzene	U	6020	6020	5350	5530	99	92	3	60 - 133	21

msv 813

Table 2.6(cont.) Results of MS/MSD Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

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Sample No: 23877

Analyte	Sample Result µg/kg	MS Spike Added µg/kg	MSD Spike Added µg/kg	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits	
									% Recovery	RPD
1,1-Dichloroethene	74.5	5950	5950	6560	6400	109	106	3	59 - 172	22
Benzene	U	5950	5950	6100	6100	102	103	0	66 - 142	21
Trichloroethene	1040	5950	5950	6870	6890	98	98	0	62 - 137	24
Toluene	U	5950	5950	5940	5900	100	99	1	59 - 139	21
Chlorobenzene	U	5950	5950	5930	5340	91	90	1	60 - 133	21

msv814

Sample No: 23882

Analyte	Sample Result µg/kg	MS Spike Added µg/kg	MSD Spike Added µg/kg	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits	
									% Recovery	RPD
1,1-Dichloroethene	420	6100	6100	6480	6490	99	100	1	59 - 172	22
Benzene	U	6100	6100	6180	6270	101	103	1	66 - 142	21
Trichloroethene	1980	6100	6100	7900	8060	97	100	3	62 - 137	24
Toluene	361	6100	6100	6180	6300	95	97	2	59 - 139	21
Chlorobenzene	U	6100	6100	5420	5540	89	91	2	60 - 133	21

msv815

Sample No: 00394

Analyte	Sample Result µg/kg	MS Spike Added µg/kg	MSD Spike Added µg/kg	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits	
									% Recovery	RPD
1,1-Dichloroethene	10.5	3050	3050	3310	3580	108	117	8	59 - 172	22
Benzene	U	3050	3050	3110	3040	102	100	2	66 - 142	21
Trichloroethene	1700	3050	3050	5900	5800	138	134	3	62 - 137	24
Toluene	10.4	3050	3050	3190	3120	104	102	2	59 - 139	21
Chlorobenzene	U	3050	3050	3010	2990	99	98	1	60 - 133	21

msv816

Sample No: 19154

Analyte	Sample Result µg/kg	MS Spike Added µg/kg	MSD Spike Added µg/kg	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits	
									% Recovery	RPD
1,1-Dichloroethene	U	53.8	53.8	55.7	61.1	122	114	7	59 - 172	22
Benzene	U	53.8	53.8	54.4	52.3	101	97	4	66 - 142	21
Trichloroethene	59.8	53.8	53.8	54.3	77.1	64	32	67	62 - 137	24
Toluene	U	53.8	53.8	57.8	55.4	108	103	4	59 - 139	21
Chlorobenzene	U	53.8	53.8	49.7	48.6	92	90	2	60 - 133	21

msv820

Table 2.6 (cont.) Results of MS/MSD Analysis for VOC in Soil  
WA # 0-198 Vestal Chlorinated Hydrocarbon Source Assessment/Remedy  
Results Based on Dry Weight

Page 4 of 4

Sample No. : 23893

Analyte	Sample Result µg/kg	MS Spike Added µg/kg	MSD Spike Added µg/kg	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits	
									% Recovery	RPD
1,1-Dichloroethene	438	5000	5000	6030	5930	112	110	2	61 - 145	14
Benzene	U	5000	5000	4770	4750	95	95	0	76 - 127	11
Trichloroethene	124	5000	5000	5330	5210	104	102	2	71 - 120	14
Toluene	U	5000	5000	5150	5100	103	102	1	76 - 125	11
Chlorobenzene	U	5000	5000	4920	4820	98	96	2	75 - 130	11

msv 817

Sample No. : 00384

Analyte	Sample Result µg/kg	MS Spike Added µg/kg	MSD Spike Added µg/kg	MS Result µg/kg	MSD Result µg/kg	MS % Rec.	MSD % Rec.	RPD	QC Limits	
									% Recovery	RPD
1,1-Dichloroethene	U	5950	5950	6340	6510	107	109	3	59 - 172	22
Benzene	U	5950	5950	5830	5970	98	100	2	66 - 142	21
Trichloroethene	454	5950	5950	6560	6740	103	106	3	62 - 137	24
Toluene	U	5950	5950	6440	6660	108	112	3	59 - 139	21
Chlorobenzene	U	5950	5950	6300	6480	106	109	3	60 - 133	21

msv819



U-1-000-4  
No: 0025-3  
Sheet 01 of 01 (Do not copy)  
(for addnl. samples use new form)

Project Name: Uncontaminated Hydrocarbons  
Project Number: 0-198  
LM Contact: N. W. Edwards Phone: 732-321-4231

PA Contract 68-099-223  
EP-C-04-032  
198-DAR-13306

Sample Identification

Analyses Requested

Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	4°C	REACT
04131	36-001 - 0.8'	S	08/21/2004	1	4-OZ glass / None		11753
04181	4.5'						11754
04182	-5'						11755
04183	-10'						11756
04184	-12'						11757
04185	-15'						11758
04186	-17.5'						11759
04187	-20'						11760
04188	-22.5'						11761
04198	-24'						11762
04199	-25'						
04200	-25-30'	water					11763
15134	-30'	water soil					11764

Special Instructions:

SAMPLES TRANSFERRED FROM  
CHAIN OF CUSTODY #:

- Matrix:
- A - Air
  - AT - Animal Tissue
  - DL - Drums 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

Received 4°C M 8/23/06

Items/Reason	Relinquished by	Date	Received by	Date	Time
all analysis	John F. ...	08/22/2004	John F. ...	8/23/06	09:00
all storage	EA-FV-dg	9/6/06	EA-FV-dg	8/23/06	09:00

**CHAIN OF CUSTODY<sup>1</sup>, RECORD**

Project Name: Vestal C. rinated Hydrocarbons  
Project Number: 0-178  
LM Contact: K. Woodruff Phone: 732-321-4231

No: 102514  
Sheet **01** of **01** (Do not copy)  
(for addnl. samples use new form)

Sample Identification				Analyses Requested		
Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	4°C VOCs
19154	SB-002 - 5'	soil	02/22/2006	1	4oz glass / None	
19155	-10'			1		
19156	-10'dup			1		
19157	-15'			1		
19158	-20'			1		
19159	SB-003 - 10'			1		
19160	-15'			1		
19162	SB-004 - 7.5'			1		
19163	-10'			1		
19161	-5'			1		
19164	SB-004 15'			1		
19165	SB-004 20'			1		
04-0481	SB-003-4.5'	soil	04/22/2006	1	4oz glass / None	VOC

**atrix:**

**Special Instructions:**

Air  
 T-Animal Tissue  
 L- Drum Liquids  
 S- Drum Solids  
 W- Groundwater  
 - Oil  
 R-Product  
 T-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 40c 7M 8/23/06

[illegible]

## Sample Identification

## Analyses Requested

Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	Analyses Requested
19169	SB0005-4'	S	8/22/06	1	403 g/lau/ 4°C	VOCs
04197	SB0005-10'			1		Salt
19167	SB0005-20'			1		X
19168	SB0005-23'			1		X
19170	SB0006-4-5'			1		X
15135	SB0007-4.5'		8/23/06	1		X
15136	SB0007-20'			1		X
15137	SB0008-5'			1		X
15138	SB0008-7.5'			1		X
15139	SB0008-15'			1		X
15140	SB0008-20'			1		X
15141	SB0008-25'			1		X
15142	SB0009-5'			1		X
19166	SB0009-10.5'			1		X
23719	SB0009-14'			1		X
23718	SB0009-17'			1		X
23733	SB0009-18'			1		X
23734	SB0009-24.5'			1		X
23736	SB0009-28.5'			1		X

Matrix: PW - Potable Water

A - Air

AT - Animal Tissue

DL - Drum Liquids

DS - Drum Solids

GW - Groundwater

O - Oil

PR - Product

PT - Plant Tissue

\* Sample 19168 was Special Instructions:  
Arrived broken 8/24/06

Sample was re-packed into a clean dry sample container 8/24/06

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #:

Received 30C 8/24/06

Item/Reason	Relinquished by	Date	Received by	Date	Time
add'l VOCs	K. Woodruff	8/23/06	James J. Turner	8/24/06	10:30
add'l VOCs	A. V. J. J.	9/16/06	James J. Turner	8/24/06	10:30



Sample Identification

Analyses Requested

Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	Analyses Requested
23879	SB014-17.5'	S	8/24/06	1	4-039 glass/cant	VOC
23870	SB011-12.5'					X
23876	SB011-20'					X
23875	SB011-18'					X
23740	SB011-17'					X
23877	SB011-19'					X
23739	SB011-9'					X
23873	SB010-18.5'		8/23/06			X
23737	SB010-22'		8/23/06			X
23738	SB010-8.5'		8/23/06			X
23882	SB010-8.5'		8/23/06			X
23883	SB016-18'					X
23884	SB015-20'					X
23878	SB015-6'					X
23881	SB012-16'					X
23880	SB013-9'					X
23885	SB017-20'					X

SAMPLES TRANSFERRED FROM  
 CHAIN OF CUSTODY #:

\* Collection date on labels of  
 Samples 23870, 23876, 23875, 23740,  
 23877, 23739, 23873, 23737, and  
 23738 is 8/23/06 JM 8/29/06

Ken Woodhuff confirmed the sampling date for samples from  
 location SB011 is 8/23/06 JM 8/25/06

Received SOC JM 8/25/06

QA (Kw) 08/24/06

- PW- Potable Water
- S- Soil
- SD- Sediment
- SL- Sludge
- SW- Surface Water
- TX- TCLP Extract
- W- Water
- X- Other

- Air
- T- Animal Tissue
- L- Drum Liquids
- SL- Drum Solids
- SW- Groundwater
- Oil
- R- R-Product
- T- Plant Tissue

Items/Reason	Relinquished by	Date	Received by	Date	Relinquished by	Date	Received by	Date	Time
all analysis	R. Woodhuff	8/24/06	Jerry Mami	8/25/06	All Analysis	8/25/06	J. Mami	8-25-06	10:00
all VOC's	A-FV-JS	9/1/06	Jerry Mami	9/1/06					

Contract # 99-223  
F2-C-04-032

# CHAIN OF CUSTODY RECORD

Project Name: Vestal Hydroelectric  
 Project Number: 0-198  
 LM Contact: R. Woodruff Phone: 732-321-4231

0-198-13

Contract # 69-699-223  
EP-04-032

No: 02-02538  
 Sheet 4 of 4 (Do not copy)  
 (for addnl. samples use new form)

## Sample Identification

## Analyses Requested

Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	Analyses Requested
23895	SB089-16	S	8/25/06	1	40g glass/4°C	VOCs
00634	SB029-17.5		8/25/06			X
00366	SB029-19		8/25/06			X
00630	SB029-20		8/25/06			X
00397	SB030-16		8/26/06			X
00400	SB030-17.5		8/26/06			X
00383	SB030-20		8/26/06			X
23896	SB030-15					X
00370	SB031-19.5					X
00388	SB032-16.5					X
00389	SB032-15					X
00386	SB032-19					X
00387	SB033-12.5					X
00385	SB033-18.5					X
00384	SB033-19.5					X
977		NW				

Matrix:

Air  
 T-Animal Tissue  
 S-Soil  
 SD-Drum Liquids  
 SL-Drum Solids  
 SW-Surface Water  
 TX-TCLP Extract  
 W-Water  
 R-Product  
 T-Plant Tissue

Special Instructions:

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #:

Received 400 PM 8/28/06

Item/Reason	Relinquished by	Date	Received by	Date	Time
Well / analysis	A. Woodruff	8/28/06	Timothy A. Woodruff	8/28/06	09:20
Well / Storage	A. Woodruff	8/28/06	Timothy A. Woodruff	8/28/06	11:45

Sample Identification

Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	Analyses Requested
A 15158	SB-042 19.5'	S	09/06/06	1	4 oz G155 / 4°C	VOCa
A 15157	SB-043 20.5'			1		X
A 23898	SB-044 15.5'			1		X
A 15155	SB-044 18'			1		X
A 15156	SB-044 20'			1		X
A 15160	SB-045 17.5'			1		X
A 15167	SB-046 16'			1		X
A 15178	SB-046 18.5'			1		X
A 15168	SB-046 20'			1		X
A 15179	SB-047 20'			1		X
A 15177	SB-048 20'			1		X
A 15180	SB-049 21'			1		X
A 15166	SB-050 19.5'			1		X
A 15154	SB-051 19.5'			1		X
A 15185	MW-005 25-30'	W	09/06/06	3	40m) VOA / 4°C	X

Special Instructions:

\* High VOCa, FID = 1000 ppm +

SAMPLES TRANSFERRED FROM  
 CHAIN OF CUSTODY #:

Received 5°C MW 9/18/06

Items/Reason	Relinquished by	Date	Received by	Date	Received by	Date	Time
ALL ANALYSIS	R. Woodward	9/17/06	Amala	9/17/06	Amala	9/18/06	7:40
ALL ANALYSIS	Tracy Parker	9/18/06	A-LV	09/18/06			

CHAIN OF CUSTODY RECORD

Project Name: Vesta Hydrocarbons  
 Project Number: 0-198  
 LM Contact: N. Wondryk Phone: 732-321-4221

0-198-1-14

Contract # 699-227  
EP-C-04-032

No: 1901  
 Sheet 01 of 02 (Do not copy)  
 (for addnl. samples use new form)

Sample Identification

Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	Analyses Requested
04108	SB-034 7.5'	S	09/05/06	1	40 glass 4°C	VOC-A
04109	SB-034 18.5'			1		X
04110	SB-035 7.5'			1		X
04111	SB-035 19-20'			1		X
04112	SB-036 19.5'			1		X
04113	SB-037 6'			1		X
04114	SB-037 20'			1		X
04115	SB-038 15'			1		X
04116	SB-038 18'			1		X
04117	SB-038 20'			1		X
04118	SB-039 17-18'			1		X
04119	SB-039 19.5'			1		X
04120	SB-039 20'			1		X
04121	SB-040 18'			1		X
04122	SB-040 20'		09/05/06	1	40 glass 4°C	X
04123	SB-041 16.5'		09/06/06	1		X
04124	SB-041 19'			1		X
04125	SB-042 17.5'			1		X

Special Instructions:

\* High VOC-A, FID = 1000 ppm +

SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #:

Received SOC 7/18/06

Items/Reason	Relinquished by	Date	Received by	Date	Time
Cell Analysis	N. Wondryk	9/17/06	Amated	9/17/06	7:40
Full Analysis	Amated	9/18/06	Amated	9/18/06	

Sample Identification

Analyses Requested

Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	Analyses Requested
23892	GW-009	GW	8/25/06	6	Hambroa/4°C	VOC
23893	GW-007		8/25/06	3		X
23890	GW-020		8/25/06	3		X
23889	GW-001		8/25/06	3		X
23887	GW-009 Dup		8/25/06	3		X
00632	old MW		8/25/06	3		X

NW

084

Special Instructions:

SAMPLES TRANSFERRED FROM  
CHAIN OF CUSTODY #:

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

Received 40C Jm 8/28/06

Relinquished by	Date	Received by	Date	Relinquished by	Date	Received by	Date	Time
all analysis	8/28/06	Jm 8/28/06	8/28/06	all analysis	8/28/06	Jm 8/28/06	8/28/06	09:20
all storage	9/20/06	Jm 9/20/06	9/20/06					



0-190 00-15

CHAIN OF CUSTODY RECORD  
Project Name: Vestal Hydrocarbons  
Project Number: 0-190  
LM Contact: R. Woodruff Phone: 732-321-4231

EP-C-04-032

Contract 68-C99-223

0198-DAR-

No: 1999  
Sheet 01 of 01 (Do not copy)  
(for addnl. samples use new form)

Sample Identification

Analyses Requested

Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	Analyses Requested
15153	SB055-19'	S	9/7/96	1	40g glass / 4°C	VOCs
15161	SB053-19'	S		1		X
15162	SB052-19.5'	S		1		X
15163	SB054-20'	S		1		X
15164	SB052-7.5'	S		1		X
15165	SB056-19.5'	S		1		X
15174	MW-B	W		3	40ml vial / 4°C	X
15175	MW-F	W		3		X
15188	MW-A	W		3		X
15193	MW-A dup	W		3		X
15189	MW-H3/44	W		3		X
15190	MW-G	W		3		X

\* ms/msd

Special Instructions:

SAMPLES TRANSFERRED FROM  
CHAIN OF CUSTODY #:

Matrix:

PW - Potable Water  
S - Soil  
SD - Sediment  
SL - Sludge  
SW - Surface Water  
TX - TCLP Extract  
W - Water  
R - Product  
T - Plant Tissue

Air  
T - Animal Tissue  
L - Drum Liquids  
S - Drum Solids  
W - Groundwater  
O - Oil  
R - Product  
T - Plant Tissue

Received 8/27/96 9/13/96

Items/Reason	Relinquished by	Date	Received by	Date	Time
15153	N. Woodruff	9/9/96	8/27/96	9/13/96	14:35
15161	Forney, T. H.	9/12/96			
15162					
15163					
15164					
15165					
15174					
15175					
15188					
15193					
15189					
15190					