

DATE: October 5, 2006

TO: Terrence Johnson, U.S. EPA/ERTC Work Assignment Manager

THROUGH: Parry Bhambra, REAC Operations Section Manager *PB*

FROM: Scott Grossman, REAC Task Leader *SG*

SUBJECT: SABANA ABAJO INDUSTRIAL PARK SITE: PHASE II - SOURCE LOCATION IDENTIFICATION, WORK ASSIGNMENT 0-111 - TRIP REPORT

BACKGROUND AND OBJECTIVES

The Sabana Abajo Industrial Park Site (Site) is located in Carolina, Puerto Rico. The Site is bounded to the north by Avenue Iturregui, to the west by a section of the Suarez Canal (a lined canal), to the south by York Property and to the east by Calle B (Figure 1). The Site is located in an Industrial Park that includes a number of active manufacturing, pharmaceutical, storage, other commercial facilities, and the two potentially responsible party (PRP) facilities owned by Biovail and Gillette respectively. The park is built on poorly sorted fill underlain by clayey and silty alluvium. Chlorinated hydrocarbon contamination of over 300,000 micrograms per liter ($\mu\text{g/L}$) in groundwater and over 400,000 micrograms per kilogram ($\mu\text{g/kg}$) in soil persist in the shallow subsurface on the Gillette facility within the industrial park.

Response Engineering and Analytical Contract (REAC) personnel provided technical assistance to the Environmental Protection Agency (EPA) Region II On Scene Coordinator (OSC) at the request of the EPA/Environmental Response Team (EPA/ERT) during the subsurface assessment to identify the source of the chlorinated solvent contamination. This trip report summarizes the second phase of work performed at the Site; the first phase was conducted in January 2005 as summarized below (Lockheed Martin 2005).

The first phase of this investigation was conducted between January 10 and 22, 2005 (Lockheed Martin, 2005). During the first phase of this project, ERT/REAC personnel installed and sampled 55 temporary monitor wells across the industrial park. In addition to the temporary monitor wells, ten permanent monitor wells previously installed on the Gillette Property were also sampled. The groundwater analytical data indicated a dissolved chlorinated hydrocarbon plume on the Gillette and Biovail properties with the center of the plume between the Gillette and Biovail buildings. Dissolved tetrachloroethene (PCE) and trichloroethene (TCE) concentrations ranged up to 67,000 $\mu\text{g/L}$ and 93,000 $\mu\text{g/L}$, respectively.

0111-DTR-100506

In addition to TCE, other breakdown products of PCE (1,1 dichloroethene [1,1-DCE], cis 1,2 dichloroethene [cis 1,2-DCE], trans 1,2 dichloroethene [trans 1,2-DCE], and vinyl chloride [VC]) were also identified in the groundwater samples. Based on the distribution of the dissolved chlorinated plume, it was inferred that the source of the contamination was between the Biovail and the Gillette buildings, but more likely on the Biovail property.

The primary objective of this second phase of this project, conducted between April 3 to 11, 2006, was to further delineate the source of contamination. To achieve this objective, a focused soil sampling effort was conducted in the alley between the Gillette and the Biovail buildings. The secondary objective of this project was to install permanent monitor wells at the soil boring locations on the Biovail Property to form a network with existing wells on the Gillette Property. This would provide an expanded shallow extent of contamination and a repeatable method for sampling groundwater from these properties and an assessment of groundwater elevations.

OBSERVATIONS AND ACTIVITIES

Soil Borings and Sampling.

A local contractor, GeoEnviroTech, Inc., hired by Weston Solutions Removal Support Team (RST) used direct push methodology to continuously collect soil samples from eleven soil borings (MW-34 to MW-41 and SB-41 to SB-44) on the Biovail and Gillette properties (Figure 2). Eight of the soil borings were located on the Biovail Property and three on the Gillette Property. The soil samples were collected in acetate sleeves in five-foot increments down to a depth of 15-foot below ground surface (bgs). Not all locations could be sampled to the maximum depth of 15-foot, because of refusal. Each soil core was logged and soil stratigraphy and texture were recorded in a field logbook. The soil cores were screened for total volatile organic compounds (VOCs) using a photo-ionization detector (PID). The soil descriptions and PID readings were recorded in field logbooks (Appendix A). Core sections with elevated PID readings were sampled, by transferring the appropriate section of soil boring to a labeled glass jar. Eighteen soil samples were collected from eight of the eleven soil boring locations. No samples were collected at locations MW-34, MW-35 and MW-36, as there were no elevated PID readings at these locations.

All soil samples were collected in accordance with the ERT/REAC SOP #2012, *Soil Sampling*. All soil samples were maintained and shipped on wet ice at a temperature of approximately 4 degrees Celsius (°C) under chain of custody procedures specified in REAC SOP #4005, *Chain of Custody Procedures*. Matrix spike/matrix spike duplicate (MS/MSD) samples, trip blanks, and field blanks were collected and analyzed as specified in ERT SOP #2005, *Quality Assurance/Quality Control Samples*. Samples were analyzed for VOCs at the REAC Laboratory in Edison, New Jersey (NJ). The REAC data validation group validated all laboratory data and the final analytical results are contained in summary tables and in the Final Analytical Report (Appendix A). Split soil samples were provided to the respective PRP's contractor at their request.

Monitor Well Installation and Sampling.

Eight of the soil borings (MW-34 to MW-41) were converted to two-inch diameter monitor wells (Figure 2). All newly installed wells were constructed to a depth of 15 feet bgs with the bottom 10 feet of the well consisting of 10 slot PVC screen (Figure 3). Seven of the new monitor wells were installed on the

0111-DTR-100506

Biovail Property and one of the new monitor wells was installed on the Gillette property. After the wells were installed, an initial round of sampling and water table elevation measurements were completed.

After a minimum of 24 hours after installation, GeoEnviroTech, following their internal procedures used over-pumping to develop all the newly installed monitor wells. After development, all wells were given a minimum of 24-hours to recover before they were purged and sampled by ERT/REAC personnel. All monitor wells were purged a minimum of three well volumes of water or until they were dry. Wells that were purged dry were given time to recover prior to sampling. All wells were sampled within 12 hours after purging, with most wells being sampled within less than one hour after purging. Sampling was performed using peristaltic pumps and dedicated Teflon[®] tubing. The pump flow rate was set as low as possible to avoid aeration of the sample. Samples were collected directly into labeled 40-milliliter (mL) glass volatile organic analysis (VOA) vials.

All groundwater sampling was conducted in accordance with REAC SOP #2007, *Groundwater Sampling*. All samples were maintained and shipped on wet ice at a temperature of approximately 4 ° C under chain of custody procedures specified in REAC SOP #4005, *Chain of Custody Procedures*. Trip blanks, field blanks and MS/MSD samples were collected and analyzed as specified in ERT SOP #2005, *Quality Assurance/Quality Control Samples*. Field logbook notes are contained in Appendix A. Groundwater samples were analyzed for VOCs at the REAC Laboratory in Edison, NJ. The REAC data validation group validated all laboratory data and the final analytical results are contained in summary tables and in the Final Analytical Report (Appendix A). Split soil samples were provided to the respective PRP's contractor at their request.

Monitor Well and Groundwater Elevation Survey.

All monitor wells (new and previously installed) were surveyed using a differential Global Positioning System (dGPS) and an automatic level. A Trimble PRO XRS dGPS was used to obtain the horizontal position for all soil boring and monitor well locations. Elevations from the top of casings (TOC) for all monitor wells and ground elevations were surveyed using a Topcon Automatic Level (Appendix A). Two points in the Suarez Canal, one located near the midpoint of the back of the Biovail property (Canal1) and one near the midpoint of the back of the property of Gillette (Canal2), were also surveyed and stream staff gages were installed at these locations. An arbitrary elevation of 100.98 feet was assigned to a benchmark (STA 5, Jorge Diaz & Assoc., Land Surveyors) on the Biovail property and all features were surveyed relative to this benchmark. Maximum loop misclosure for each survey was less than 0.01 foot.

A groundwater interface probe was used to measure the depth to groundwater from the TOC in all new and existing monitor wells. Two sets of groundwater level measurements were collected, one on April 8, 2006 and a second set on April 11, 2006. The groundwater elevations collected on April 11, 2006 contained a complete set of data; however, two wells on the Gillette property were not accessible for the April 8, 2006 survey.

RESULTS AND DISCUSSION

Monitor Well and Groundwater Elevation Survey

Table 1 summarizes the results of the monitor well and groundwater elevation survey. Figure 4 shows groundwater elevation contours developed from the interpolated groundwater elevation data for April 11,

0111-DTR-100506

2006 as given in Table 1. Groundwater appears to flow from the Biovail and Gillette properties in generally a westerly direction towards the Suarez Canal. Groundwater elevations on April 11, 2006 ranged from 97.8 feet on the eastern side of the site at MW-6 to 95.7 feet on the western side of the site at MW-21 near the Suarez Canal. At the time of this investigation, the water levels in the canal were lower than the adjacent water table elevation indicating that groundwater may be entering the canal from the site. This observation is based on one set of water level measurements; seasonal changes may affect the migration pattern of the groundwater.

Soil Investigation

Table 2 summarizes the PID field screening and analytical results for the VOCs detected in the soil samples. The field screening PID data is contained in the field logbook notes (Appendix A) and the laboratory data is contained in the Final Analytical Report (Appendix B).

The primary compounds detected in the soil samples were PCE, TCE, cis 1,2-DCE and VC. The compound with the highest concentration was PCE (2,620,000 µg/kg) followed by cis 1,2-DCE (62,700 µg/kg) and TCE (31,100 µg/kg) and VC (6,960 µg/kg). Several other VOCs (acetone, 1,1-dichloroethene, methylene chloride and trans-1,2-dichloroethene) were detected in limited soil samples and at relatively low concentrations (219 µg/kg or less).

Figure 5 plots the concentrations of total chlorinated compounds detected in soil samples. The highest soil concentration (2,700,00 µg/kg) for total chlorinated compounds was found on the Biovail property at MW-39 at a depth of 6.5 to 7.0 feet. The total chlorinated compounds in this sample consisted primarily of PCE (97.9%) with lesser concentrations of TCE (1.2%) and cis 1,2-DCE (0.9%). Total chlorinated compound concentrations in this sample was more than an order of magnitude higher than in any soil boring sample collected during this investigation. In fact, the three highest concentrations of chlorinated compounds in soil were found at MW-39.

On the Gillette property, the highest soil concentration of chlorinated compounds was found at MW-41 at a depth of 8.5 to 9.0 feet. This concentration is an order of magnitude lower than the highest concentration observed at MW-39, which is located on the Biovail property about 10 feet to the south of MW-41. Also, the highest concentration of chlorinated compounds at MW-41 is found at a greater depth than the highest concentration of chlorinated compounds at MW-39. This trend in concentration and depth indicate that the source area is near or upgradient of MW-39 on the Biovail property.

The total chlorinated hydrocarbon concentration in soil collected from MW-39 at the 15-foot depth was 260,000 µg/kg. Based on this, it appears that the contamination may also extend below the maximum depth sampled during this investigation.

The high concentrations of volatile organic compounds detected in the soil samples indicate that residual dense nonaqueous phase liquid (DNAPL) is likely present at the source in the shallow subsurface (less than 6.5 feet bgs). The sharp drop in soil concentrations of chlorinated compounds from the highs in soil borings proximal to MW-39 (i.e., soil borings MW-41, MW-42, MW-43 and MW-44) suggests a point source of limited area. Also, it appears that the source is limited to the area between north of the Biovail Building and south of the perimeter fence dividing the two properties; based on the relatively low concentrations of chlorinated compounds detected in samples collected at SB-44 (to the south) and MW-41, MW-42, and MW-43 (to the north). This observation is based solely on one sample collected south of

0111-DTR-100506

the source area. The extent of the source to the east and west, although slightly less defined, is constrained by the data from soil borings collected at MW-40 (to the east) and MW-38 (to the west).

Groundwater Investigation

Table 3 summarizes the analytical results for the VOCs detected in the groundwater samples. All analytical methods and results are contained in the Final Analytical Report (Appendix B). As with the soil samples, the primary compounds detected in the groundwater were PCE, TCE, cis 1,2-DCE, and VC. The groundwater sample collected at MW-41 on the Gillette property had the highest concentration of dissolved total chlorinated hydrocarbons (470,000 µg/L) and also the highest concentrations of cis 1,2-DCE (323,000 µg/L) and TCE (42,900 µg/L). The groundwater sample with the highest PCE (88,900 µg/L) and VC (42,700 µg/L) concentrations was collected on the Gillette property at location MW-06. Other chlorinated compounds detected in the groundwater samples included 1,1-DCE, 1,1-dichloroethane (1,1-DCA), chlorobenzene, and 1,2-dichlorobenzene (1,2-DCB). These contaminants were only detected in three of the groundwater samples and were detected at relatively low concentrations (14 µg/kg or less).

As specified in the Final Analytical Report (Appendix B), PCE was detected in a trip blank collected on 8 April 2006 and in a method blank (041206-1) analyzed on 12 April 2006. Due to the PCE contamination in these blank samples, the results for samples 19450 through 19455 and 19664 were reported as non detect and the PCE reporting limits (RL) were raised for these samples. It should be therefore noted that PCE concentrations up to RL may exist at these locations, but were reported as non detect in the Final Analytical Report. Locations impacted by this included MW-2 (RL = 15,100 µg/L), MW-2 Dup (RL = 15,400 µg/L), and MW-17 (RL = 5,310 µg/L).

Figures 6 through 8 are color contour maps of dissolved total chlorinated compounds, PCE and TCE concentrations in groundwater. The maps were developed from the concentration data in Table 3 using Spatial Analyst module in ERSI® ArcMap™ Version 9.0. The concentration used for MW-39 is the arithmetic mean of the MW-39 sample and its duplicate.

In all three figures, the general shape and orientation of the contaminant plumes are similar. The contaminant plumes appear to be moving from the Biovail to the Gillette property with an elongate trend towards the Suarez Canal, likely caused due to the prevailing groundwater flow direction. The highest dissolved VOC concentrations are generally confined to an area between MW-17/MW-2 to the west and MW-40 to the east. All locations outside this area to the north, south and west had total chlorinated compound concentration at or below 130 µg/kg, PCE concentrations at or below 48 µg/kg and TCE concentrations at or below 19.6 µg/kg. The relatively low level of VOCs detected at sample locations between the plume and the Suarez Canal either indicate a very confined plume or possibly the wells were not deep enough to intercept the plume.

CONCLUSIONS AND RECOMMENDATIONS.

Based on the results of this investigation, it appears that primarily a PCE residual DNAPL source exists in the shallow subsurface on the Biovail Property near or upgradient of MW-39. A dissolved chlorinated hydrocarbon plume emanates from this source to the shallow groundwater. The dissolved plume has migrated onto the Gillette Property with a northwesterly orientation towards the Suarez Canal. The

residual DNAPL, if not remediated, will continue to act as a source for dissolved chlorinated hydrocarbons in the groundwater for a very long time. The DNAPL source appears to be point source and does not appear to extend beneath the Biovail Building (based on results from SB-44).

Additional monitor wells should be installed at a greater depth between the plume and the Suarez Canal to confirm that the contamination is confined to the areas shown on Figures 6 through 8 and the plume is not just passing below the 15-foot deep monitor wells (MW-21, MW-36, and MW-35) previously installed in this area. If contaminants are not detected in these additional wells, the source would then not extend much beyond the 15-foot depth (near or upgradient of MW-39), and groundwater can be excluded from remedial actions. Excavation would be an attractive remedy to address the VOC contamination on the Biovail and Gillette properties but in-situ treatment should also be considered.

Additional monitoring of water levels and sampling of groundwater in the monitor well network is recommended to verify the results obtained during this mobilization and evaluate seasonal trends. Additionally, soil sampling in the vicinity of MW-39 is recommended to determine the horizontal and vertical extent of contamination. This could be done during the remedy phase or excavation with field screening techniques.

REFERENCE

Lockheed Martin REAC, 2005. Trip Report, Sabana Abajo Industrial Park PCE Site: Source Location Identification, Work Assignment 0-0111. Prepared for U.S. EPA/Environmental Response Team (U.S. EPA/ERT). Submitted by Lockheed Martin, Response Engineering and Analytical Contract (REAC). November 2005.

Table 1
Automatic Level and GPS Survey Data
Sabana Abajo Site
Carolina, PR
September 2006

Location	Well Type	Property	Universal Transverse Mercator NAD 1983 Zone 20N (meters)		TOC Elevation (feet)	Ground Elevation (feet)	Total Depth April 2006 (feet)	Depth to Water* 8 April 2006 (feet)	Depth to Water* 11 April 2006 (feet)	Water Elevation 8 April 2006 (feet)	Water Elevation 11 April 2006 (feet)
			X	Y							
MW-02	Monitor Well	Gillette	184,050.0	2,039,381.9	101.20	101.25	14.78	5.24	5.36	95.96	95.84
MW-03	Monitor Well	Gillette	184,061.9	2,039,384.6	101.75	101.97	14.84	4.7	5.68	97.05	96.07
MW-05	Monitor Well	Gillette	184,086.0	2,039,389.7	102.16	102.23	14.62	5.84	5.61	96.32	96.55
MW-06	Monitor Well	Gillette	184,097.7	2,039,392.4	102.12	102.23	12.3	3.76	4.31	98.36	97.81
MW-16	Monitor Well	Gillette	184,094.0	2,039,404.0	102.38	102.52	12.88	NA	5.84	NA	96.54
MW-17	Monitor Well	Gillette	184,046.3	2,039,397.9	101.51	101.54	14.71	5.54	5.69	95.97	95.82
MW-21	Monitor Well	Gillette	184,034.7	2,039,402.3	100.84	100.96	11.89	3.83	5.15	97.01	95.69
MW-29	Monitor Well	Gillette	184,095.0	2,039,431.0	102.57	102.68	14.67	NA	5.33	NA	97.24
MW-30	Monitor Well	Gillette	184,028.3	2,039,420.6	100.33	100.53	10.83	4.1	4.4	96.23	95.93
MW-33	Monitor Well	Gillette	184,062.5	2,039,430.1	102.39	102.57	14.2	5.24	5.35	97.15	97.04
MW-34	Monitor Well	Biovail	184,074.1	2,039,346.9	100.74	100.95	14.82	4.21	4.32	96.53	96.42
MW-35	Monitor Well	Biovail	184,049.1	2,039,366.6	100.63	101.01	15.05	4.54	4.63	96.09	96.00
MW-36	Monitor Well	Biovail	184,042.0	2,039,373.3	100.51	100.74	15.08	4.57	4.67	95.94	95.84
MW-37	Monitor Well	Biovail	184,055.2	2,039,378.4	101.39	101.65	15.51	5.34	5.43	96.05	95.96
MW-38	Monitor Well	Biovail	184,078.5	2,039,385.9	102.05	102.36	15.18	5.74	5.83	96.31	96.22
MW-39	Monitor Well	Biovail	184,090.7	2,039,388.7	102.51	102.91	15.04	3.02	4.88	99.49	97.63
MW-40	Monitor Well	Biovail	184,106.8	2,039,391.7	103.30	103.73	14.88	7.66	6.11	95.64	97.19
MW-41	Monitor Well	Gillette	184,090.2	2,039,390.7	101.90	102.21	14.68	5.94	5.26	95.96	96.64
SB-42	Soil Boring	Gillette	184,087.7	2,039,393.4	-	-	-	-	-	-	-
SB-43	Soil Boring	Gillette	184,090.0	2,039,392.6	-	-	-	-	-	-	-
SB-44	Soil Boring	Biovail	184,088.9	2,039,386.0	-	-	-	-	-	-	-
Canal1	Water Level	Canal	-	-	-	95.38	-	-	-	95.38	-
Canal2	Water Level	Canal	-	-	-	95.34	-	-	-	95.34	-

TOC - Top of Casing

*Depth to Water = Depth to Water from Top of Casing

Table 2
Summary of Volatile Organic Compounds in Soil Boring Samples
Sabana Abajo Site
Carolina, PR
September 2006

(all laboratory concentrations in $\mu\text{g/kg}$)

Sample Location	Sample Number	Field Screening*	Total Chlorinated	Trichloroethene	Tetrachloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-37 13' to 13.5'	19426	7,000	2,900	748	1,580	388 J	ND
MW-38 4.5' to 5'	19428	3,200	720	ND	ND	ND	584
MW-38 7.5' to 8'	19429	21,700	35,000	6,950	18,000	9,820	ND
MW-38 9.5' to 10'	19430	29,000	9,400	2,790	1,500	5,080	ND
MW-38 13.5' to 14'	19431	5,900	22,000	6,290	5,610	9,660	319 J
MW-39 4.5' to 5'	19432	12,500	30,000	6,430	986	21,400	947
MW-39 6.5' to 7'	19433	120,000	2,700,000	31,100 J	2,620,000	24,100 J	ND
MW-39 9.5' to 10'	19434	120,000	600,000	ND	571,000	28,800 J	ND
MW-39 14.5'-15'	19435	47,000	260,000	6,250 J	185,000	62,700	6,960 J
MW-40 14.5'-15'	19438	500	870	97	422	125	166
MW-41 6.5' to 7'	19441	275,000	8,700	543 J	4,330	3,850	ND
MW-41 8.5' to 9'	19442	182,000	180,000	ND	175,000	ND	ND
MW-41 11.5' to 12'	19443	156,000	10,000	1,500	2,200	6,320	ND
MW-41 12.5' to 13'	19444	205,000	23,000	3,140	957	19,100	ND
MW-42 14.5' to 15'	19445	47,200	7,700	1,450	2,090	3,680	445
MW-43 9.5' to 10'	19446	37,100	400	43	26 J	222	113
MW-43 11.5' to 12'	19447	50,200	520	75	96	195	149
SB-44 11' to 12'	19461	2,400	3,000	445	1,100	637	761

ND - Not Detected at Concentration above the Reporting Limit

J - Estimated Value

*Field Screening concentration as determined by PID in parts per million (ppm)

Table 2 (Continued)
Summary of Volatile Organic Compounds in Soil Boring Samples
Sabana Abajo Site
Carolina, PR
September 2006

(all laboratory concentrations in $\mu\text{g/kg}$)

Sample Location	Sample Number	Acetone	1,1-Dichloroethene	Methylene Chloride	trans-1,2-Dichloroethene
MW-37 13' to 13.5'	19426	ND	ND	210 J	ND
MW-38 4.5' to 5'	19428	137 J	ND	ND	ND
MW-38 7.5' to 8'	19429	ND	ND	ND	ND
MW-38 9.5' to 10'	19430	ND	ND	ND	ND
MW-38 13.5' to 14'	19431	66 J	20 J	219 J	60 J
MW-39 4.5' to 5'	19432	ND	ND	195 J	ND
MW-39 6.5' to 7'	19433	ND	ND	ND	ND
MW-39 9.5' to 10'	19434	ND	ND	ND	ND
MW-39 14.5'-15'	19435	ND	ND	ND	ND
MW-40 14.5'-15'	19438	59 J	ND	ND	ND
MW-41 6.5' to 7'	19441	ND	ND	ND	ND
MW-41 8.5' to 9'	19442	ND	ND	ND	ND
MW-41 11.5' to 12'	19443	ND	ND	ND	ND
MW-41 12.5' to 13'	19444	ND	ND	ND	ND
MW-42 14.5' to 15'	19445	ND	ND	ND	ND
MW-43 9.5' to 10'	19446	ND	ND	ND	ND
MW-43 11.5' to 12'	19447	8.6 J	ND	ND	ND
SB-44 11' to 12'	19461	37 J	ND J	ND	ND

ND - Not Detected at Concentration above the Reporting Limit

J - Estimated Value

Table 3
Summary of Volatile Organic Compounds in Groundwater Samples
Sabana Abajo Site
Carolina, PR
September 2006

(all concentrations in $\mu\text{g/L}$)

Sample Location	Sample Number	Total Chlorinated	Trichloroethene	Tetrachloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-02	19454	4,700	3,480	ND	1,260 J	ND
MW-02 (Dup)	19455	4,500	3,350	ND	1,130 J	ND
MW-03	19456	3,100	1,110	764	1,090	169
MW-05	19457	43,000	1,570	6,950	30,200	3,780
MW-06	19460	220,000	8,130	88,900	82,500	42,700
MW-16	19475	17,000	3,280	8,410	3,560	1,790
MW-17	19453	26,000	5,950	ND	17,400	2,750
MW-21	19452	85	4.1 J	ND	79	2.6 J
MW-29	19474	ND	ND	ND	ND	ND
MW-30	19451	ND	ND	ND	ND	ND
MW-33	19450	4.2	4.21 J	ND	ND	ND
MW-34	19462	130	20	48	28	23
MW-35	19463	55	5.5	ND	10	7.9
MW-36	19464	8.8	ND	ND	2.0 J	2.2 J
MW-37	19465	20,000	4,000	14,400	1,530 J	ND
MW-38	19466	110,000	34,200	35,900	32,800	3,900 J
MW-39	19470	200,000	10,900	67,300	100,000	19,200
MW-39 (Dup)	19471	160,000	7,890 J	56,700	80,900	10,500
MW-40	19472	10,000	1,210	7,010	1,550	276 J
MW-41	19473	470,000	42,900	68,600	323,000	33,000

ND - Not Detected at Concentration above the Reporting Limit

J - Estimated Value

Table 3 (Continued)
Summary of Volatile Organic Compounds in Groundwater Samples
Sabana Abajo Site
Carolina, PR
September 2006

(all concentrations in $\mu\text{g/L}$)

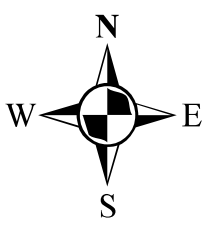
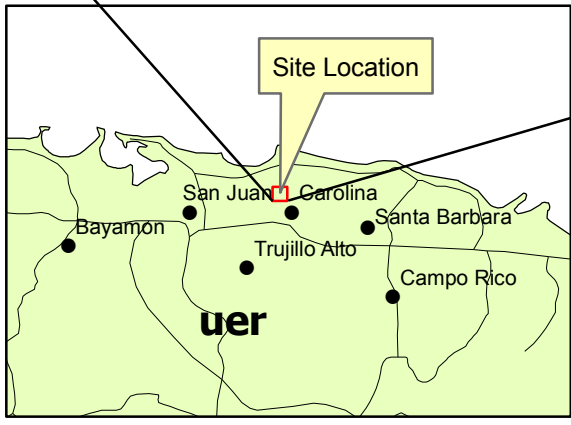
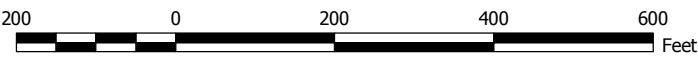
Sample Location	Sample Number	1,1-Dichloroethene	1,1-Dichloroethane	Chlorobenzene	1,2-Dichlorobenzene
MW-02	19454	ND	ND	ND	ND
MW-02 (Dup)	19455	ND	ND	ND	ND
MW-03	19456	ND	ND	ND	ND
MW-05	19457	ND	ND	ND	ND
MW-06	19460	ND	ND	ND	ND
MW-16	19475	ND	ND	ND	ND
MW-17	19453	ND	ND	ND	ND
MW-21	19452	ND	ND	ND	ND
MW-29	19474	ND	ND	ND	ND
MW-30	19451	ND	ND	ND	ND
MW-33	19450	ND	ND	ND	ND
MW-34	19462	ND	ND	10	4.6 J
MW-35	19463	12	14	3.4 J	1.3 J
MW-36	19464	2.7 J	2.0 J	ND	ND
MW-37	19465	ND	ND	ND	ND
MW-38	19466	ND	ND	ND	ND
MW-39	19470	ND	ND	ND	ND
MW-39 (Dup)	19471	ND	ND	ND	ND
MW-40	19472	ND	ND	ND	ND
MW-41	19473	ND	ND	ND	ND

ND - Not Detected at Concentration above the Reporting Limit

J - Estimated Value



Map Creation Date: 7 March 2005
Revised: 14 July 2005
Coordinate metadata: Universal
Transverse Mercator Zone 20N
1983 North American Datum



U.S. EPA Environmental Response Team
Response Engineering and Analytical Contract
EP-C-04-032
WO # EAC00111

Figure 1
Site Location Map
Sabana Abajo PCE Site
Carolina, PR
October 2006



Map created by
C. R. Naeve, a general
ranger and author

Legend

buildings

water

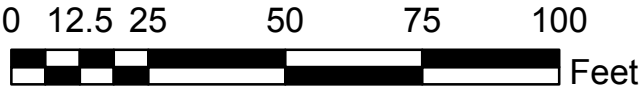
Roads

Fence

Existing Monitor Well

New Monitor Well and Soil Boring Location

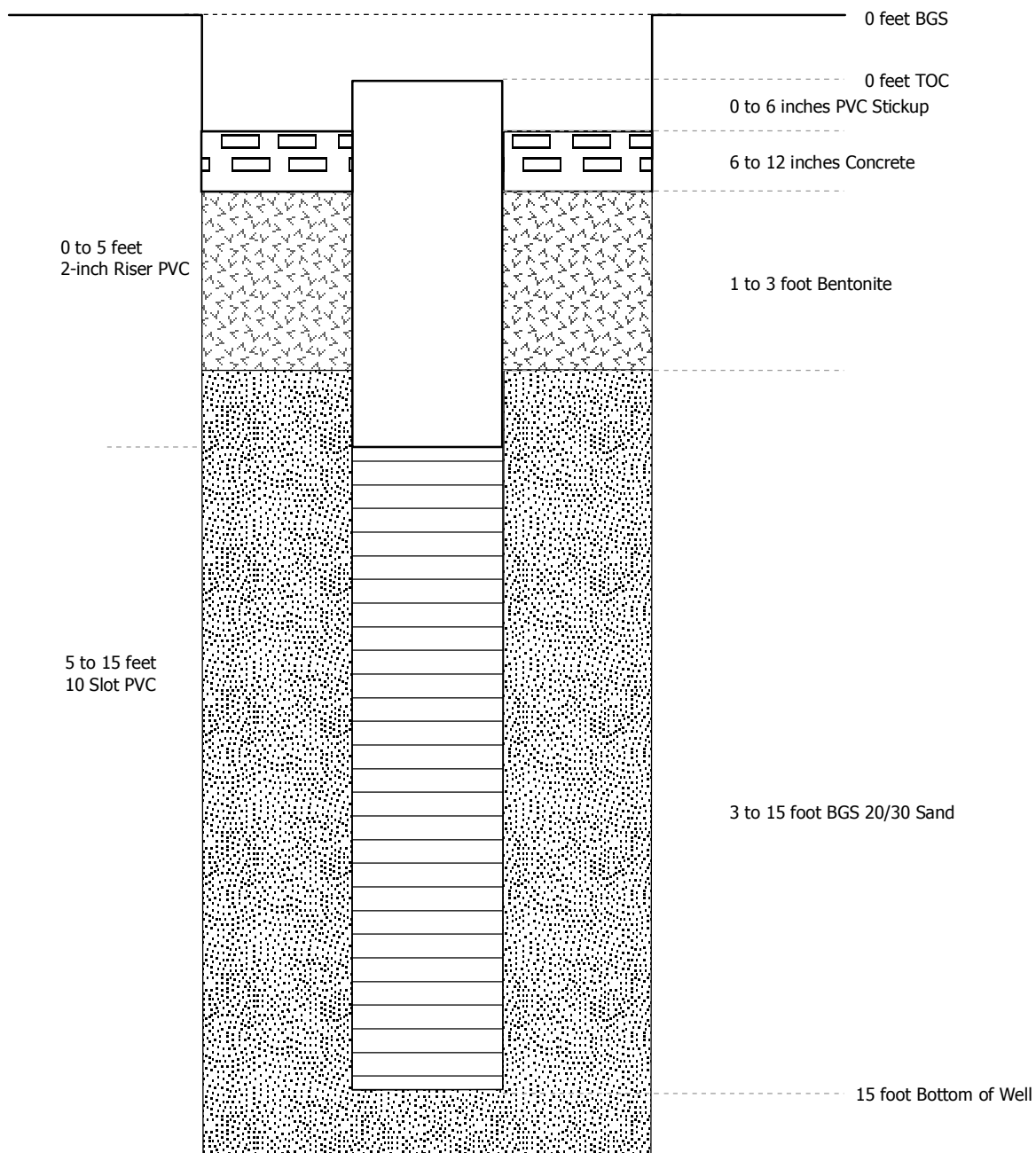
Soil Boring Location






Southwestern
Environmental
Consulting

Superior
Sales and
Construction
Company

General Well Construction



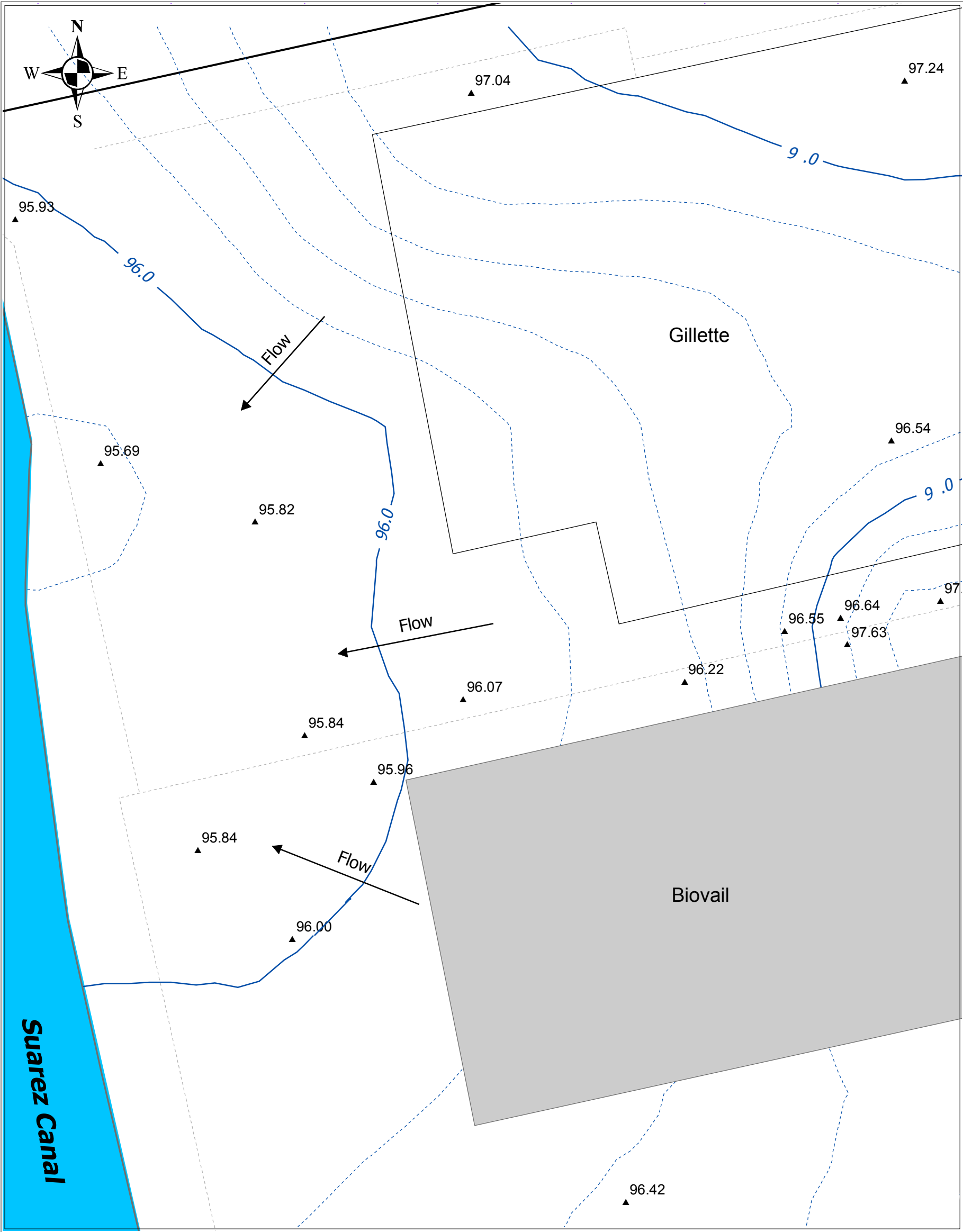
Legend

-  Concrete
-  Bentonite
-  20/30 Sand

Wells constructed by: GeoTech Environmental, April 2006
Flush Mount Wellhead Protector

U.S. EPA Environmental Response Team
Response Engineering and Analytical Contract
EP-C-04-032
WA # 0-111

Figure 3
General Well Construction
Sabana Abajo Industrial Park
Carolina, Puerto Rico
October 2006



Map Creation Date: 12 May 2006
Revised: 21 August 2006
Coordinate metadata: Universal
Transverse Mercator Zone 20N
1983 North American Datum

Legend

97.0

Groundwater Elevation, Major Contour (feet)

Groundwater Elevation, Minor Contour

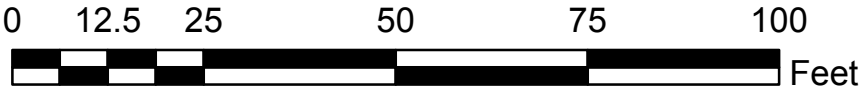
Surface Water

96.54

Monitor Well with Water Elevation (feet)

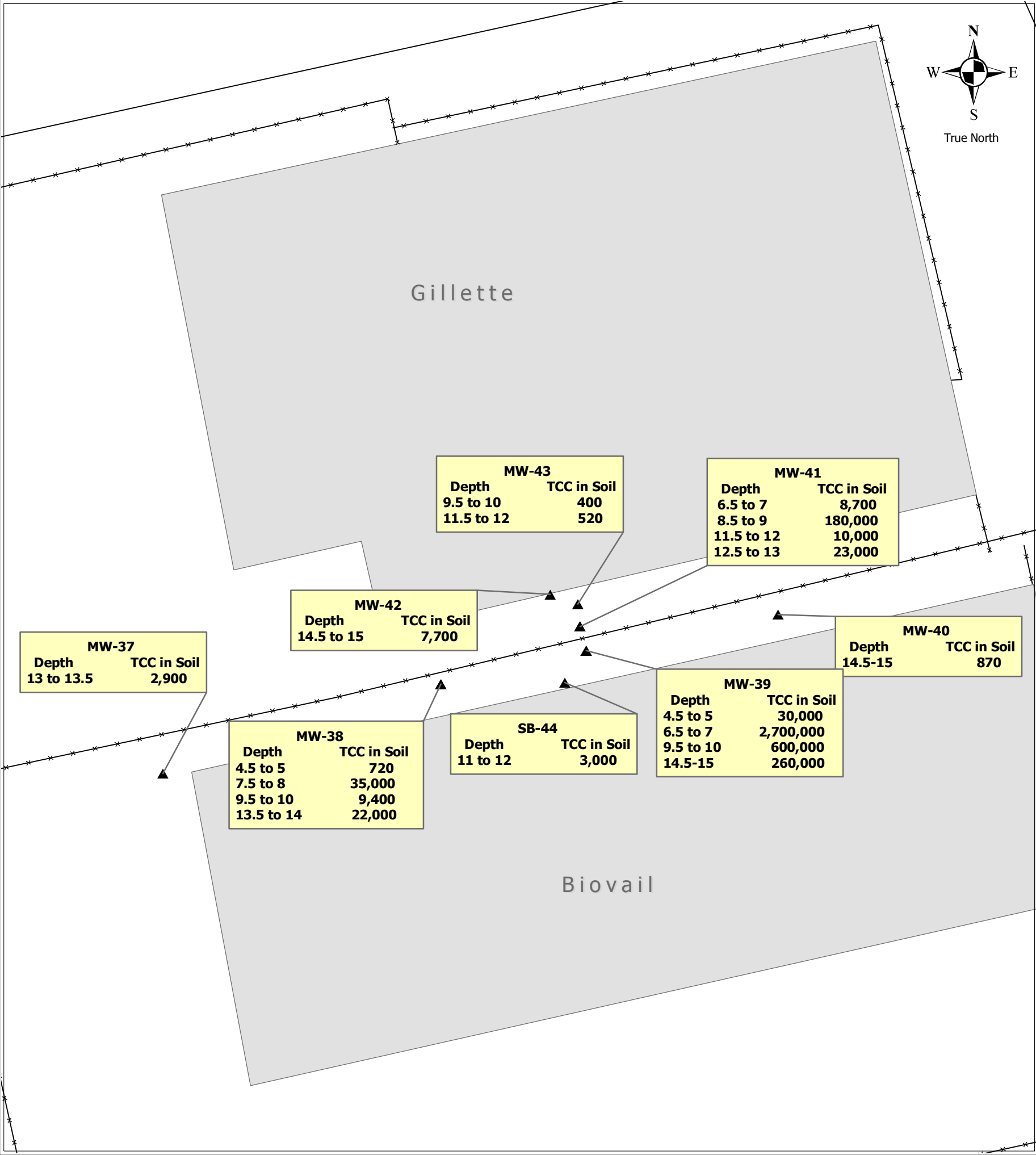
Groundwater Elevations 4-11-2006

Contour Interval 0.2 feet



U.S. EPA Environmental Response Team
Response Engineering and Analytical Contract
EP-C-04-032
WA # 0-111

Figure 4
Groundwater Elevation Map
Sabana Abajo Industrial Park
Carolina, Puerto Rico
October 2006



Map created using site survey GPS and USGS DOQQ. GPS collected in Lat., Lon., Decimal Degrees, WGS84

Map Creation Date: 18August2006

Coordinate system: UTM
Zone: 20N
Units: Meters
Datum: NAD83



Legend:

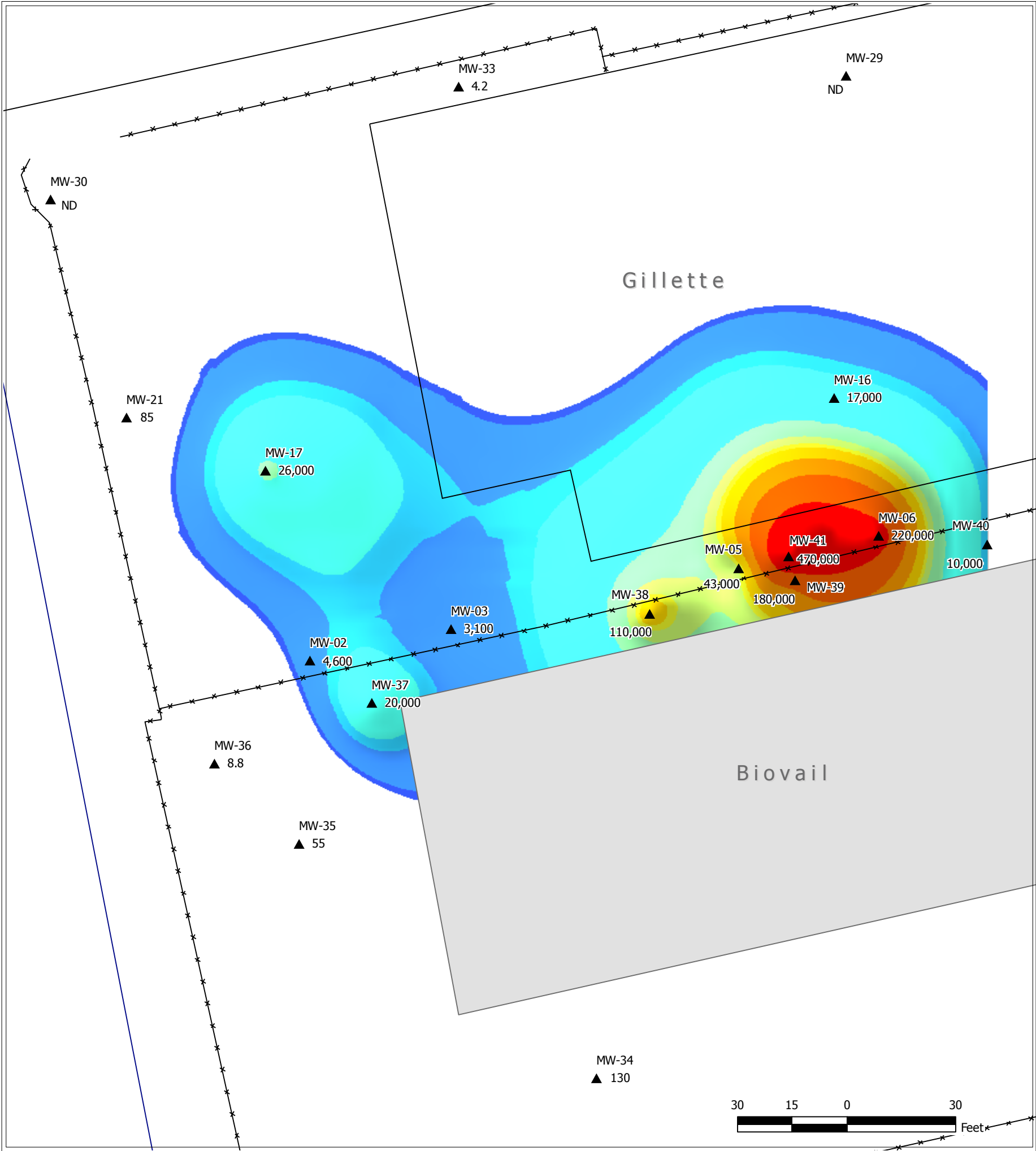
▲ Sample Location

—x— Fenceline

Notes:

TCC - Total Chlorinated Compounds
Depth in Feet Below Ground Surface (BGS)
Concentrations in micrograms per kilogram (µg/kg)

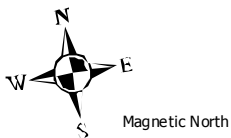




Map created using site survey GPS and USGS DOQQ. GPS collected in Lat., Lon., Decimal Degrees, WGS84

Map Creation Date: 18August2006

Coordinate system: UTM
Zone: 20N
Units: Meters
Datum: NAD83



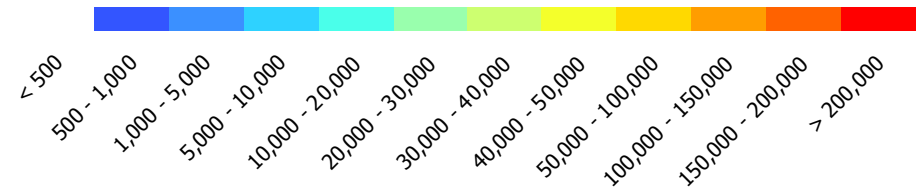
Legend

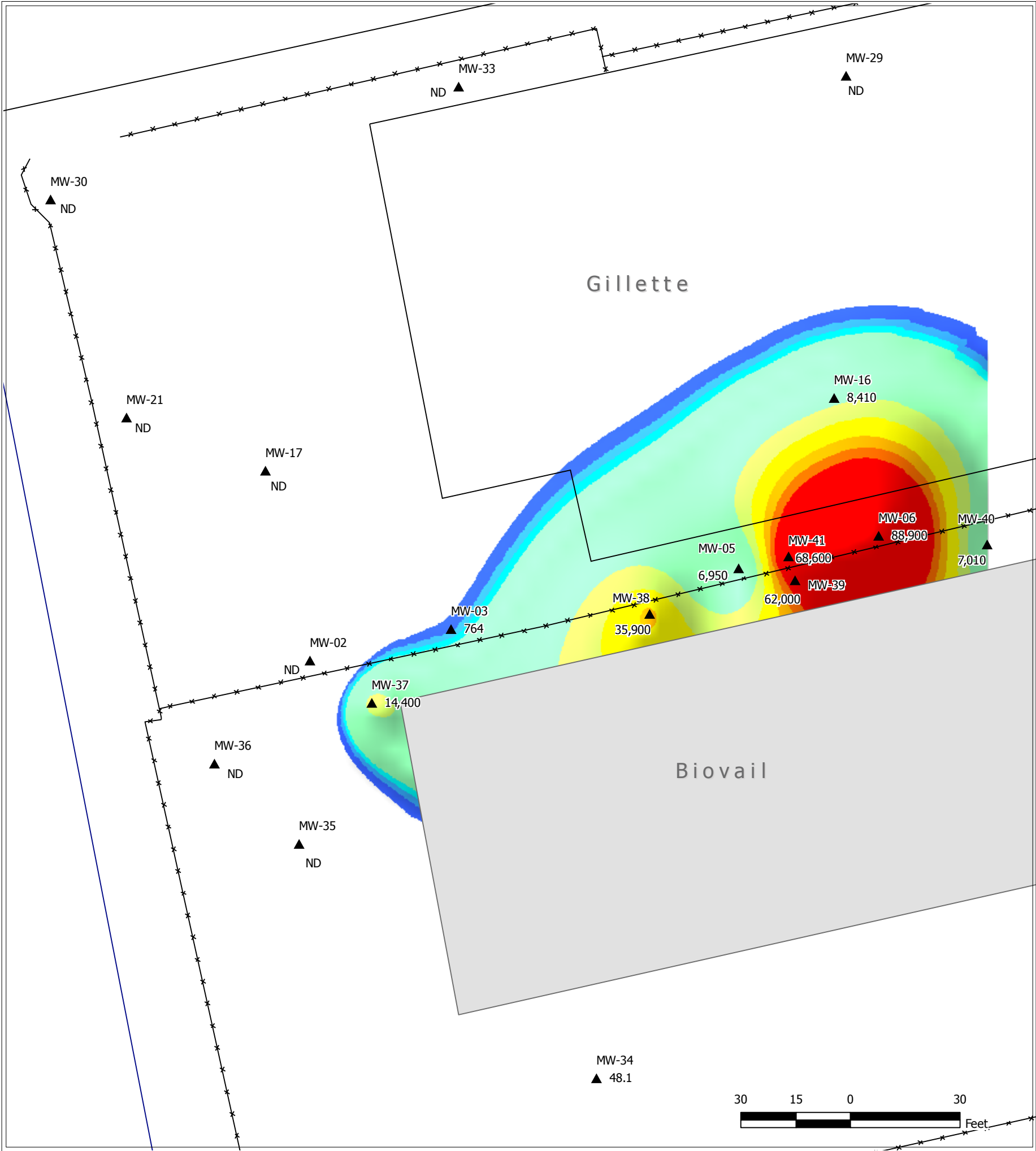
▲ Sample Location

— Fenceline

Total Chlorinated Compounds in Groundwater

Total Chlorinated Compounds in micrograms per liter (µg/L)

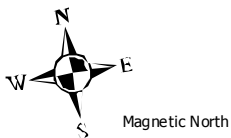




Map created using site survey GPS and USGS DOQQ. GPS collected in Lat., Lon., Decimal Degrees, WGS84

Map Creation Date: 18August2006

Coordinate system: UTM
Zone: 20N
Units: Meters
Datum: NAD83



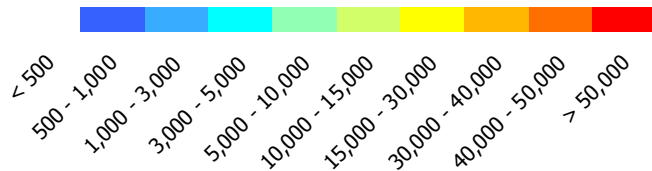
Legend

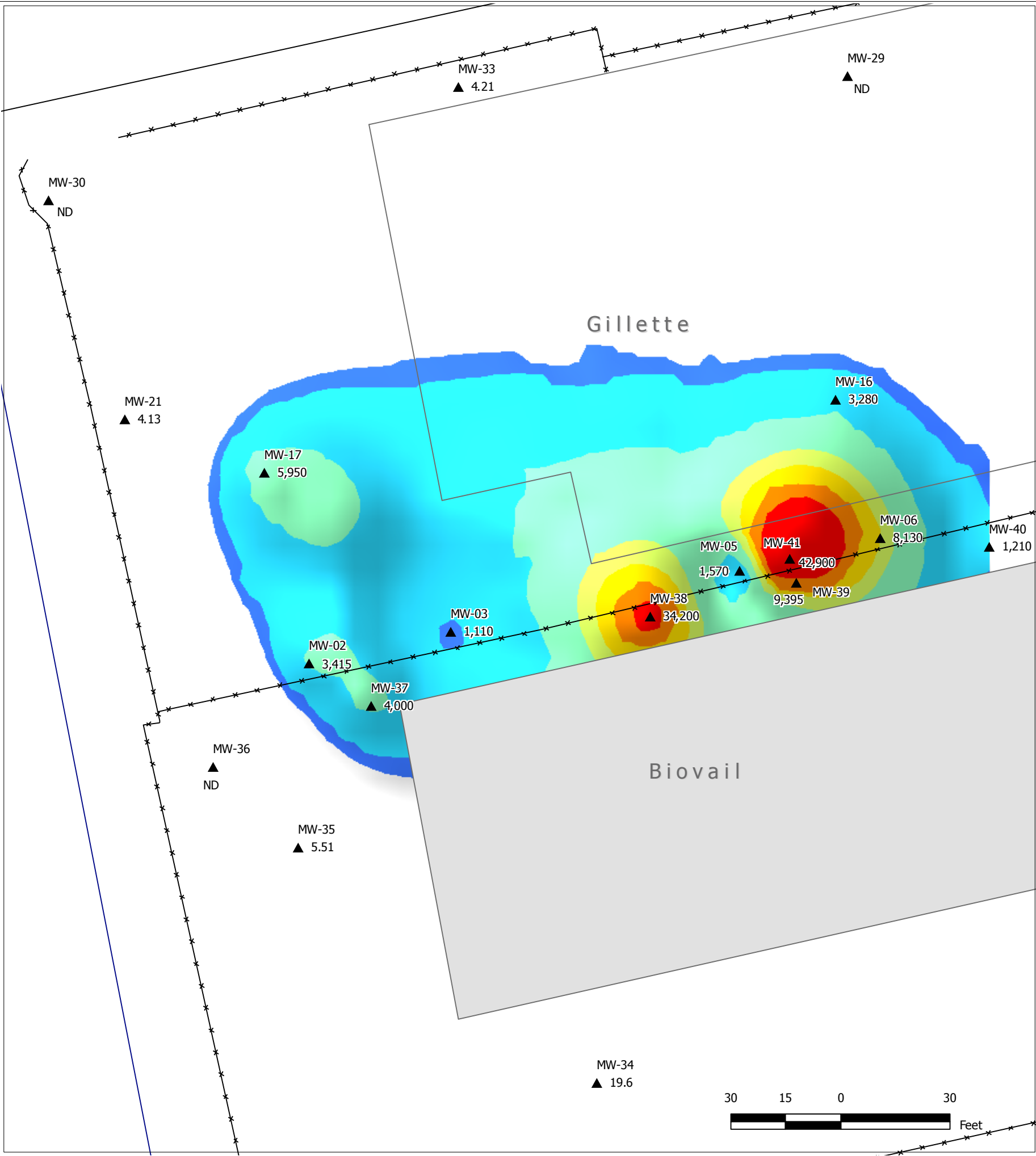
▲ Sample Location

— Fenceline

Tetrachloroethene in Groundwater

Tetrachloroethene in micrograms per liter ($\mu\text{g/L}$)

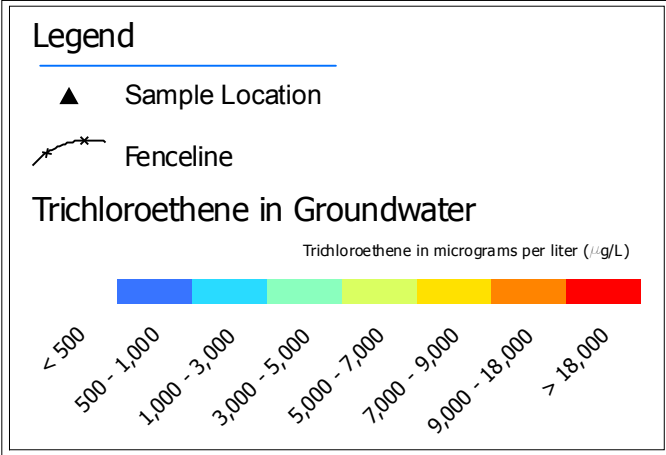
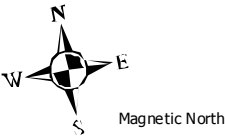




Map created using site survey GPS and USGS DOQQ. GPS collected in Lat., Lon., Decimal Degrees, WGS84

Map Creation Date: 18August2006

Coordinate system: UTM
Zone: 20N
Units: Meters
Datum: NAD83



APPENDIX A
Field Log Book Notes
Sabana Abajo Industrial Park Site
Trip Report
October 2006

4/3/06 Newark → San Juan, PR

Arrive on site @ 1330

MW34 Soil boring logged by T. Johnson ^{NO}
low ppm on multirae

1400 MW35

Sampled / Soil Boring by G. Prince
low ppm (13) on multirae
No samples collected

4/4/06 MW36 Soil Boring Prince / Groomer
less than = 0.1 ppm
No samples collected

1100 MW37 Soil Boring ^{Johnson} Prince / Groomer
- 1 sample max conc. 7 ppm @ 15'

19426 MW37 13'-13.5' 1136 7.0 ppm

* Poor recovery on 0-5' / resampled at adjacent point

1150 MW38 Soil Boring Prince / Groomer
- 4 samples max conc. 32 ppm @ 8.5'

19428 MW38 4.5'-5.0' 1200 3.2 ppm

19429 7.5'-8.0' 1215 21.7 ppm

19430 9.5'-10.0' 1220 29.0 ppm

19431 13.5'-14.0' 1240 5.9 ppm

1530 MW39 Soil Boring Prince / Groomer
- 4 samples max conc. 120 ppm

19432 4.5'-5.0' 1536 125 ppm

19433 6.5'-7.0' 1550 120 ppm

19434 9.5'-10.0' 1604 120 ppm

19435 15.0'-15.5' 1625 47 ppm

2 samples shipped via FedEx (020700)
 C-O-C # 07874
 CD sent to R. Alvarado (8554 8043 2437)

4/6/06 0800 Arrive on site 1 Ice / 0 Haze

MW 39 Well installed

MW 38 / MW 37 Parged

Start soil boring @ MW 40

Terrance requested SUMAs and
 analysis of Air samples

2 sets of 2 4 samples

1 dup

1 blank

6 SUMMA

Called Ken, Woodruff, Phil Solinski
 and Y. Lin

Ken will look into getting SUMAs

Y. Lin can analyze samples

1310 MW 40 Soil Boring Prime / Gravel

Low pH 0 - 0.5 ppm arsenic

1 sample submitted for

analysis

1320 MW 40 14.5 - 15.0 1335 0.5 ppm

Ship

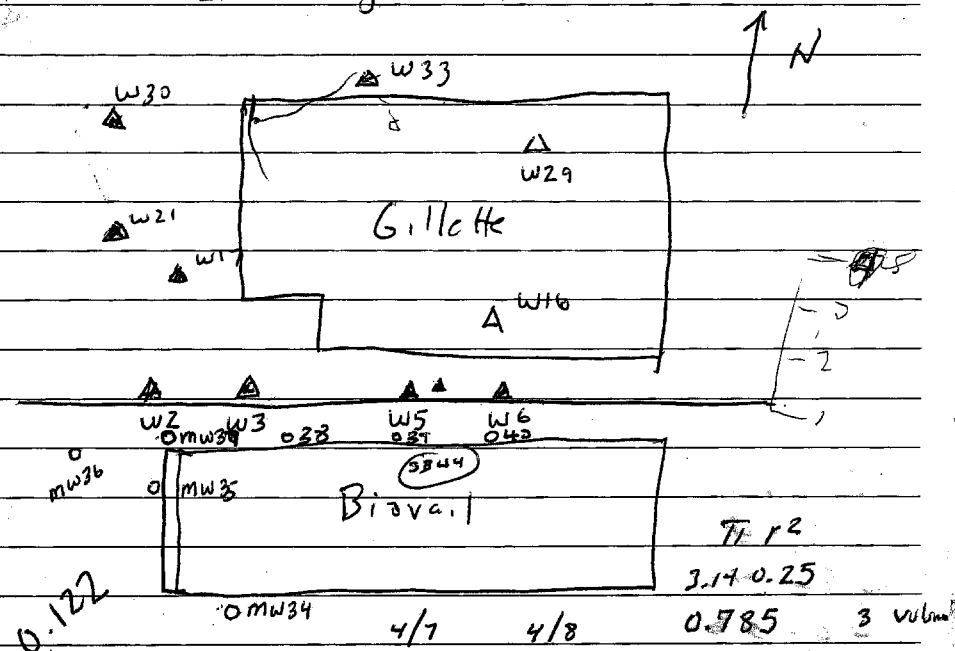
Soils modified 8270 8250

8260 B

4/7/06 Install 2 gauges on panels

one behind Gillette and one
 behind Biava

U. 701 AL (George)
 I turregu Ave



7 April

1323

MW - 41

Gillette Property

6-1.0 No recovery

~~1.0-1.5 Broken concrete fill~~

1.0-1.5 light black clay with
gravel

1.5-2.0 brown/black clay
with gravel

2.0-2.3 gravel with clay

2.3-3.5 brown clay with gravel

3.5-4.0 concrete

4.0-5.0 No recovery

2.5-3.5 0.1 ppm

2.5-3.5 0.0 ppm

1.5-3.5 0.0

1.1 fill

5.5-7.5 75 ppm

6.5-7.5 75 ppm

7.5-8.5 34.7 ppm

8.5-9.5 132 ppm

9.5-10.5 119 ppm

10.5-11.5 91.2 ppm

11.5-12.5 156 ppm

12.5-13.5 80.5 ppm

13.5-14.5 115.2 ppm

14.5-15.5 100.1 ppm

15.5-16.5 50.5

16.5-17.5 50.5

Samples

6.5' - 7.0'

8.5' - 9.0'

11.5 - 12

12.5 - 13

5.0 to 6.5

grey clay with
brown mottling

6.5 to 7.2

brown/orange clay
little fine sand

7.2 to 10

beige clay with
brown mottling
very stiff

10 to 11.

fine
sand gray with
some clay
very moist

11 to 13

gray stiff clay

13 to 15

brown clay stiff
dry

1445 MW 42

3' 0.2 ppm

3.5 0.1 ppm

4.5 0.4 ppm

0-2.5 No recovery

2.5-2.7 asphalt

2.7-3.5 fill gravel

3.5-3.7 orange / brown clay

3.7-4.1 brown clay gravel

4.1 to 5.0 gray silt clay brown modelling

5.5 0.1

6.5 1.7

7.5 3.5

8.5 4.4

9.5 6.0

5.0 - 5.8 Very wet s.H/clay full look

5.8 - 9.2 gray clay with brown modelling

9.2 - 9.4 dark gray / blue

9.4 - 10 beige / orange clay

10.5 0.4 ppm

11.5 7.6 ppm

12.5 28.3 ppm

13.5 15.2 ppm

14.5 47.2

1 Sample

14.5 - 15.5

10 - 11.5

gray clay with some sand slightly moist

11.5 12

Very wet sand / clay

12 to 15

light gray clay with brown modelling starts to brown clay with light gray modelling with depth little moisture

4/8/04 MW33

1115

1.1g 1.25 gallon

1135 MW30

1 gallon

1150 MW21

500z - dry

1205 MW17

700z - dry

MW2

1.25 gallon

1410 MW3

0.75 gallon - dry + 0.10 gallon purged sample

MW5

0.5 gallon - dry

1452

MW6

0.5 gallon - dry

MW43 1522

0 to 1.4 No recovery
1.4 to 1.9 asphalt
1.9 to 4.2 fill gravel
clay/silt
4.2 to 5.0 gray stiff clay

2.0' 0 ppm
3' 0 ppm
4' 0 ppm
4.75' 0.1 ppm

5 - 5.5 fill back (gravel clay)
5.5 - 8.0 gray clay orange med. r.
8.0 - 8.8 orange/gray clay
8.8 - 9.0 sandy clay
9.0 - 10 orange gray clay with some sand

5.5 0.1
6.5 1.5
7.5 4.1
8.5 7.6
9.5 37.1

9.5 to 10 samp

11.5 - 12.0

~~10.5 12~~
10.5 13.6
11.5 50.2
12.5 47.9
13.5 36.4
14.5 23.1

10 - 11.5 gray beige clay

11.5 12.2 clay with some sand
soft

12.2 - 15 gray / orange clay
stiff

7 APRIL 2006 SOIL BITINGS

MW41	6.5 to 7.0'	1334	B19441
MW41	8.5 to 9.0'	1338	B19442
MW41	11.5 to 12.0'	1357	B19443
MW41	12.5 to 13.0	1401	B19444
MW42	14.5' to 15.0'	1507	B19445
MW43	9.5 to 10.0	1532	B19446
MW43	11.5 to 12	1554	B19447
Field	Blank		D19448
Trip	Blank		D19449

$$1'' = 0.5/12 = 0.0417$$

$$\frac{1.073775}{1.240101} = \pi/2$$

$$3.14 \times 0.001736 = 0.00545$$

$$8.96 \times 0.00545 = 0.0488 \text{ cu feet}$$

$$0.048811 \times 7.48 \text{ gallon} = 0.37 \text{ ft}^3$$

$$0.37 \times 3 = 1.1 \text{ gallon}$$

8 APRIL 2006 GROUNDWATER SAMPLES

MW33	1116	K19450
MW30	1136	K19451
MW21	1352	K19452
MW17	1404	K19453
MW2	1226	K19454
MW3 (ms/min)	1516	K19456
MW5	1531	K19457
MW6	1632	K19460
Field Blank	1624	K19458
Trip Blank	1630	K19459
MW2 Dup	1226	K19455

Dr. n. Gauge 1 0.08'

Stream Gauge 2 0.1'

SB44 ~~10~~ 11-12' 10:27 K19461

GROUND WATER 4-10-06

MW34	1145	mo/msp	K19462
MW35	1415		K19463
MW36	1510		K19464
MW37	1555		K19465
MW38	1645		K19466
Field Blank Water	1625		K19467
Field Blank SWIL	1630		K19468

⑦

(#) hi G- elev

STA 1	4.96	104.96		100
MW34 TOL		104.96	4.22	100.74
MW34 GROUND		104.96	4.01	100.95
MW35 TOL		104.96	4.33	100.63
MW35 GROUND		104.96	3.95	101.01
MW36 TOL		104.96	4.45	100.51
MW36 GROUND		104.96	4.22	100.74
STA 5		104.96	3.98	100.98

TP1 4.50 104.96 4.50 100.46

TP1 5.14 105.60 5.14

MW35 TOL 105.60 4.97 100.63

MW36 TOL 105.60 5.09 100.51

STA 5 105.60 4.62 100.98

STA 1 105.60 5.59 100.01

CIRCU LATER LEVEL 10.21 95.40

" 10.74 95.37

" 1.25 95.36

STA 5 4.62 100.98

MW37 TOL 4.21 101.39

MW37 GR 3.95 101.65

MW38 TOL 3.55 102.05

MW38 GR 3.24 102.36

MW39 TOL 3.09 102.51

MW39 GR 2.69 102.91

TP2 3.70 101.90

TP2 5.59 107.48

MW38 TOL 107.48 5.43 102.05

MW39 TOL	107.48	4.98	102.50
MW40 TOL	107.48	4.18	103.30
MW40 GR	107.48	3.75	103.73
TP2	107.48	5.58	101.90
TP2	4.14	106.04	
MW37 TOL		4.65	101.39
STA5		5.055	100.985
MW36 TOL		5.53	100.51
MW35 TOL		5.41	100.63
STA1		6.04	100.
TP3		5.185	100.855
TP3	4.33	105.185	
MW34 TOL		4.45	100.735
STA1		5.185	100.00
STA5		hi	
STA X		(GC STA5) + 5.50	
		100.98 + 5.50 = 106.48	
		(+) hi (-) elev	
Green PT1	106.48	4.78	101.70
MW2 TOL		5.28	101.20
MW2 GR		5.23	101.25
MW3 TOL		4.73	101.75
MW3 GR		4.51	101.97
MW21 TOL		5.64	100.84
MW21 GR		5.52	100.96
MW17 TOL		4.97	101.51
MW17 GR		4.94	101.54
Current water level		11.14	95.34
Green PT1		4.78	101.70
TP4 (GREEN PT2)		5.02	101.46
TP4 (GREEN PT2)	5.10	106.56	5.10

MW21 TOL	106.56	5.72	100.84
MW17 TOL		5.05	101.51
MW30 TOL		6.23	100.33
MW30 GRIND		6.03	100.53
MW33 TOL		4.175	102.385
MW33 GRIND		3.998 ⁵⁰	102.57
MW30 TOL		6.23	100.33
TP4 (GREEN PT2)		5.10	101.46
TP4 (GREEN PT2)	5.65	107.11	
Green PT1		5.41	101.70
MW2 TOL		5.905	101.205
MW3 TOL		5.36	101.75
MW5 TOL		4.95	102.16
MW5 GR		4.88	102.23
MW41 TOL		5.21	101.90
MW41 GR		4.905	102.205
MW6 TOL		4.99	102.12
MW6 GR		4.885	102.225
STA 5		6.13	100.98
MW37 TOL		5.72	101.39

GREEN PT1

Ki

101.70 101.70

STA A 5.52 107.22

MW 3 107.22 5.47 101.75

MW 5 107.22 5.06 102.16

MW 4 107.22 5.32 101.90

MW 6 107.22 5.10 102.12

55.001

24.101

07.10

205.101

25.101

01.501

85.501

100.101

205.501

5.501

255.501

88.001

92.101

SB 44

2' Oppm

12' dppr

0-1 no recovery

1-1.2 broken concrete

1.2-1.8 brown clay some gravel (fill)

1.8-2.0 gray clay

3.75 0.1 4.5 0.4

3.50 0.0 5.0 0.3

3.25 0.0 5.5 0.3

3.00 0.0 5.75 1.1

~~0.4~~ 2.0-2.25 No recovery

2.25-2.50 gray clay

2.50-2.60 orange clay with gray gravel

3-4 gray clay

4-4.25 gray clay

4.25-4.5 gray clay with gravel

4.5-6.0 gray clay

6-8 NO Recovery

8.5 2.3 ppm
 9.0 1.3 ppm
 9.5 1.1 ppm
 9.75 1.3 ppm

8-10 grey with orange mottling
 clay

10.5' 1.5 ppm
 11' 2.3 ppm
 11.5 2.4 ppm
 11.75 3.2 ppm

12' 3.8 ppm
 12.25' 3.3 ppm

12 TO 12.5

12 TO 12.25 clayey grey/orange sand
 12.25 TO 12.50 grey with orange
 mottling clay with sand

2" well

$$\pi \times 2 \times L$$

$$3.14 (1/12)^2 \times L$$

$$3.14 \times L$$

$$2.14 \times 10$$

$$3.14 \times 7.48$$

$$\pi (1/12)^2 \times L$$

$$3.14 (0.00694) \times L$$

$$0.0218 \times L \times 7.48 \times 3$$

$$0.489 \times L$$

1110 4.31' depth to water
 MW34 PURGE ~~5.25~~ gallon
 5.5 gallon

1145 Sample Collected 6 vials MS/MXD

MW35

1335 4.65' Depth to Water
 purge volume 5.5 gallon
 1415 Sampling

MW36

4.73' depth to water
 1510 ~~1415~~ sampling
 5.5 g purged

MW37

5.52 depth to water
 1520 5.25 gallon purged
 1555 Sample collected

MW38

5.85 depth to water
 5.0 gallon purged
 1645 Sample collected

11 April 2006

Depth to Water 0900-1130

MW35 4.63

MW 36 4.67

MW 37 5.43

MW 38 5.83

MW 59 - 4.8.8

MW40 64 14.93 (TOTAL DEPTH)

MW 33 5.35

MW 30 \rightarrow 4.40

Mw 17 5.69

MW 2 5.36

MW 3 5.68

14-00000 5.61

MW 6 4.31

MW 41 5.20

MW 21-5.15

MW 16 5.84 12.88 (Total depth)

NW 29 533 14.67 (total depth)

MW 34 4.32

MW 40 START PULGE @ 11:35

DRY @ 11:50

Stamp @ 1207

MAW 39 START PURGE @ 11:40

Przy 0 0,17.53 12:54

DRY ~~3.5~~ gallons purged
3.5 gallons

SAMPLE 0 12:33 DUPLICATE SAMPLE

26 мавз

10.0 JB43

14.3

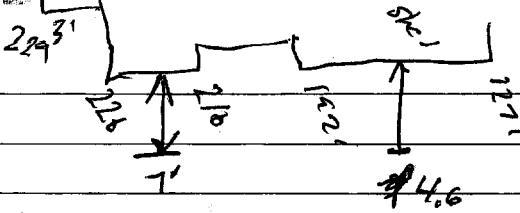
Gillette Fine

15.6' fence
to green Pt
#1

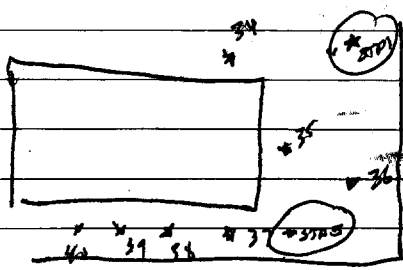
G. Neft

Bild Verif

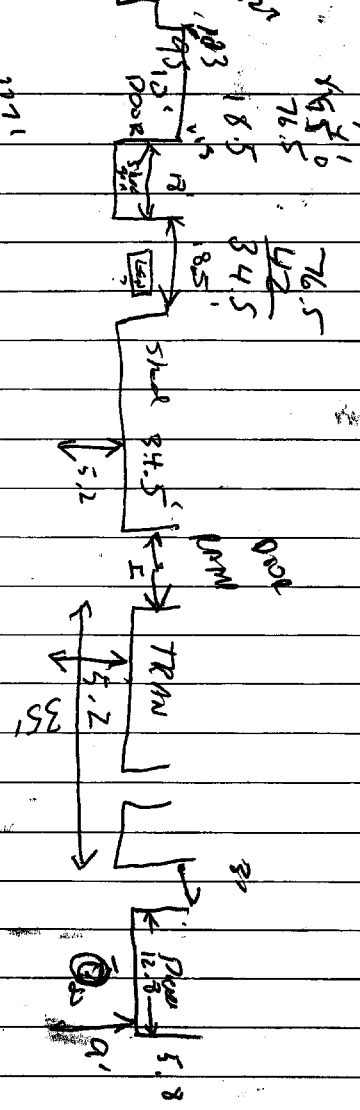
© Blue Sky The Color of Imagination, LLC. All rights reserved.



123
136
7'



PURGE PINZ ASSOC
795-0924
STA 5
LAND SURVEYORS



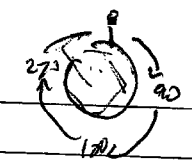
MW41 1228 START PURGE

MW 29 1440 START PURGE
125 gallon
1500 SAMPLE COLLECTED

MW 16 1510 START PURGE
1 gallon
~~1324~~ 1524

12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

②



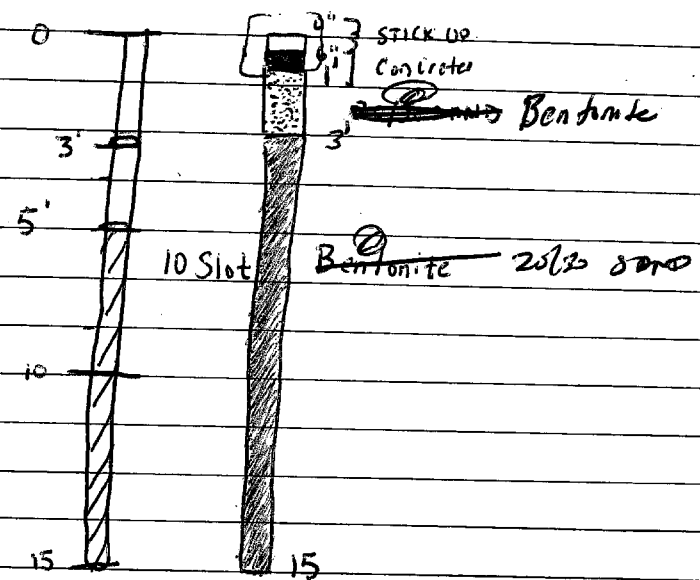
		112	
Green PT 1			101.70
	5.365	107.065	
TP "X"		4.525	102.54
TP "X"	5.19	107.73	
MW 29 TOC		5.165	102.565
MW 29 Ground		5.11	102.62
MW 16 TOC		5.35	102.38
MW 16		5.21	102.52
TP "Y"		5.29	5.55 102.18
TP "Y"	4.66	106.84	4.66 10
Green PT 1		5.145	101.695

STA F → GAW	0°	5.06	5.68
STA F → "X"	227°	4.77	4.28
STA G → "X"	0°	5.005	4.885
G → MW 29	220°	4.92	5.415
G - MW 16	283°	4.88	5.82
	0 → 1°		
G → TP Y	0.5°	5.09	6.01
H → TP Y	0°	4.85	4.46

Groundwater Samples

MW 39	K19470
MW 39 DUP	K19471
MW 40 m/s/m	K19472
MW 41 m/s/m	K19473
MW 29	K19474
MW 16	K19475
Field	K19476
Trip	K19477

H → 6 Green	110°	4.88	5.41
PT 1			



APPENDIX B
Final Analytical Report
Sabana Abajo Industrial Park Site
Trip Report
October 2006

Lockheed Martin Technology Services
Environmental Services REAC
2890 Woodbridge Avenue Building 209 Annex
Edison, NJ 08837-3679
Telephone 732-321-4200 Facsimile 732-494-4021

LOCKHEED MARTIN



DATE: 28 July 2006
TO: R. Singhvi EPA/ERTC
FROM: V. Kansal Analytical Section Leader *Vinod Kansal*
SUBJECT: DOCUMENT TRANSMITTAL UNDER WORK ASSIGNMENT # 0-111

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

Sabana Abajo PCE - Analytical Report

Central File WA # 0-111
T. Johnson
S. Grossman
J. Soroka

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

ANALYTICAL REPORT


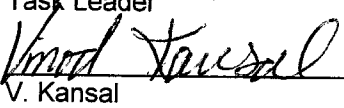
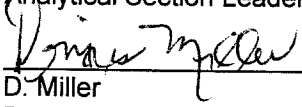
Prepared by
LOCKHEED MARTIN, Inc.

Sabana Abajo Industrial Park PCE Site
Sabana Abajo, Puerto Rico

July 2006

EPA Work Assignment No. 0-111
LOCKHEED MARTIN Work Order EAC00111
EPA Contract No. EP-C-04-032

Submitted to
T. Johnson
EPA-ERT

	<u>7/31/06</u>
S. Grossman	Date
Task Leader	
	<u>8/3/06</u>
V. Kansal	Date
Analytical Section Leader	
	<u>8/7/06</u>
D. Miller	Date
Program Manager	

Analysis by:
REAC

Prepared by:
Y. Mehra

Reviewed by:
J. Soroka

Table of Contents

Topic

Introduction
Case Narrative
Summary of Abbreviations

Section I

Results of the Analysis for VOC in Water	Table 1.1
Results of TIC for VOC in Water	Table 1.2
Results of the Analysis for VOC in Soil	Table 1.3
Results of TIC for VOC in Soil	Table 1.4

Section II

Results of the Internal Standard Areas and Surrogate Percent Recoveries For VOC in Water	Table 2.1
Results of the LCS Analysis for VOC in Water	Table 2.2
Results of the MS/MSD Analysis for VOC in Water	Table 2.3
Results of the Internal Standard Areas and Surrogate Percent Recoveries For VOC in Soil	Table 2.4
Results of the LCS Analysis for VOC in Soil	Table 2.5
Results of the MS/MSD Analysis for VOC in Soil	Table 2.6

Section III

Chains of Custody

Appendix A Data for VOC in Water	R 151
Appendix B Data for Voc in Soil	R 152

Appendix will be furnished on request.

Introduction

REAC in response to WA 0-111, provided analytical support for environmental samples collected from Sabana Abajo Industrial Park PCE, Site located in Carolina, Puerto Rico 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 methods, the results, 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	Laboratory	Data Package		
07877	11	4/08/2006	4/11/2006	Water	VOC	REAC	R 151		
07877	6	4/10/2006							
07879	8	4/11/2006							
07874	2	4/04/2006	4/06/2006	Soil					R 152
	10	4/05/2006							
07873	3	4/06/2006	4/07/2006						
07876	9	4/07/2006	4/11/2006						
	2	4/10/2006							

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. All data validation flags have been inserted into the results tables.

VOC in Water Package R 151

The trip blank 19459 (4/8/06) and method blank 041206-1 contained tetrachloroethene, The tetrachloroethene results for samples 19450 through 19455 and 19664 are reported as non detect and the RLs are raised because the sample results were less than 5 times the blank concentration.

The reporting limit was less than four times the y-intercept for the cis-1,2-dichloropropene, bromoform, 4-methyl-2-pentanone, 2-hexanone, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene and naphthalene regression equations. The RLs for these compounds are based on four times the y-intercept of the regression equations for all samples and method blanks.

In the initial calibration of 3/31/06 the relative percent difference were exceeded for bromomethane and acetone. All bromomethane results for all samples are estimated. The acetone result for method blank 041406-1 is estimated.

In the continuing calibration on 4/11/06 the percent difference were exceeded for bromomethane, chloroethane and trichlorofluoromethane. The trichlorofluoromethane results for method blank 041106-02, samples 19458 through 19460, 19456 and 19457 are estimated.

In the continuing calibration on 4/14/06 the percent difference were exceeded for dichlorofluoromethane, bromomethane, acetone and 2-hexanone. The acetone result for method blank 041406-1 is estimated.

VOC in Soil Package R 152

Soil method blank B040706-1 contained acetone. The acetone results for the associated samples 19439 and 19440 are reported as non detect because the sample results are less than ten times the blank concentration.

Methanol method blank B041206-1 contained acetone. The acetone results for the associated samples 19444 is reported as non detect because the sample concentration was less than ten times the blank concentration.

Trip blank 19449 contained cis-dichloroethene, vinyl chloride and tetrachloroethene. The cis-dichloroethene and vinyl chloride results are reported as non detect for sample 19448 because the sample concentration was less than five times the blank concentration.

Initial calibration-(WN0411B)-04/11/06 (System B): The Relative Response Factor exceeded acceptable criteria for 1,2-dibromo-3-chloropropane at 5 ppb. The reporting limit for this compound was raised to 20 ppb for associated samples.

Initial Calibration- 04/03/06 (System A): The linear regression for dichlorofluoromethane, chloroethane, trichlorofluoromethane, bromoform, 1,3,5-trimethylbenzene and 1,2-dibromo-3-chloropropane showed the y-intercept above the lowest concentration of the calibration curve. The RLs for these compounds are based on four times the y-intercept of the regression equations for samples 19429, 19430, 19426, 19432 through 19435 and methanol blanks A-040606-1 and A-040706-2.

Initial Calibration- 04/03/06 (System B): The linear regression for bromoform, 1,2-dibromo-3-chloropropane and 1,2,4-trimethylbenzene showed the y-intercept above the lowest concentration of the calibration curve. The RLs for these compounds are based on four times the y-intercept of the regression equations for samples 19427, 19428, 19431, 19436, 19437, 19439, 19440, 19438, 19461, 19448, 19449, 19468, 19446, 19445 and soil blanks B040606, B040706 and B041106.

Initial Calibration- 04/11/06 (System B): The linear regression for bromoform, 1,2-dibromo-3-chloropropane, 4-methyl-2-pentanone, 2-hexanone, 1,2,4-trichlorobenzene and naphthalene showed the y-intercept above the lowest concentration of the calibration curve. The RLs for these compounds are based on four times the y-intercept of the regression equations for samples 19441 through 19444 and methanol blank B-041206-01.

Initial Calibration- 04/12/06 (System B): The linear regression for bromoform, cis-1,2-dichloropropene, naphthalene, 1,2-dibromo-3-chloropropane, 4-methyl-2-pentanone and 1,2,4-trichlorobenzene showed the y-intercept above the lowest concentration of the calibration curve. The RLs for these compounds are based on four times the y-intercept of the regression equations for samples 19447 and soil blank B-041206-2.

Initial Calibration 04/03/06 (System A): The acceptable QC limits for %RSD was exceeded for bromomethane and acetone. Bromomethane results are estimated (UJ) for samples 19426, 19429, 19430, 19432 through 19435 and methanol blanks A040606-1 and A040706-2.

Continuing Calibration-04/07/06 (System A): The percent difference exceeded the acceptable QC limits for chloroethene and trichlorofluoromethane. Trichlorofluoromethane results are estimated for methanol blank A040706-2 and 19435.

Continuing Calibration-04/12/06 (System B): The percent difference exceeded the acceptable QC limits for acetone. Acetone results are estimated for sample 19447.

Summary of Abbreviations

C	Centigrade				
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 Dibenzofurans (PCDF)				
CLP	Contract Laboratory Procedure				
COC	Chain of Custody				
Conc	Concentration				
CRDL	Contract Required Detection Limit				
CRQL	Contract Required Quantitation Limit				
DL	Detection Limit				
E	Value is greater than the highest linear standard and is estimated				
EMPC	Estimated maximum possible concentration				
ICAP	Inductively Coupled Argon Plasma				
IS	Internal Standard				
J	Value is estimated				
LCS	Laboratory Control Sample				
LCSD	Laboratory Control Sample Duplicate				
MDL	Method Detection Limit				
MS (BS)	Matrix Spike (Blank Spike)				
MSD (BSD)	Matrix Spike Duplicate (Blank Spike Duplicate)				
MW	Molecular Weight				
NA	either Not Applicable or Not Available				
NC	Not Calculated				
NR	Not Requested				
NS	Not Spiked				
% D	Percent Difference				
% Rec.	Percent Recovery				
PAL	Permissible Acceptance Limit				
ppbv	parts per billion by volume				
PQL	Practical Quantitation Limit				
QA/QC	Quality Assurance/Quality Control				
QL	Quantitation Limit				
R	The value is not usable				
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 ³	cubic meter	kg	kilogram	µg	microgram
L	liter	g	gram	pg	picogram
mL	milliliter	mg	milligram	ng	nanogram
µL	microliter	µg/m ³	microgram/cubic meter		
*	Value exceeds the acceptable QC limit				

Revision 03/01/2006

Table 1.1 Result of the Analysis for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Method : REAC SOP 1806

Page 1 of 8

Sample Number: Water Blank A 041106-2		19458		19460		19456		19459		
Sample Location:		Field Blank		MW6		MW3		Trip Blank		
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	8.32	U	8.32	U	4160	U	100	U	8.32
Chloromethane	U	5.00	U	5.00	U	2500	U	100	U	5.00
Vinyl Chloride	U	5.00	U	5.00	42700	2500	169	100	U	5.00
Bromomethane	U	J 5.00	U	J 5.00	U	J 2500	U	J 100	U	J 5.00
Chloroethane	U	32.5	U	32.5	U	16300	U	650	U	32.5
Trichlorofluoromethane	U	J 52.2	U	J 52.2	U	J 26100	U	J 1044	U	J 52.2
Acetone	U	20.0	U	20.0	U	10000	U	400	U	20.0
1,1-Dichloroethene	U	5.00	U	5.00	U	2500	U	100	U	5.00
Methylene Chloride	U	5.00	U	5.00	U	2500	U	100	U	5.00
Carbon Disulfide	U	5.00	U	5.00	U	2500	U	100	U	5.00
Methyl-t-butyl Ether	U	5.00	U	5.00	U	2500	U	100	U	5.00
trans-1,2-Dichloroethene	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,1-Dichloroethane	U	5.00	U	5.00	U	2500	U	100	U	5.00
2-Butanone	U	5.00	U	5.00	U	2500	U	100	U	5.00
2,2-Dichloropropane	U	5.00	U	5.00	U	2500	U	100	U	5.00
cis-1,2-Dichloroethene	U	5.00	U	5.00	82500	10000	1090	100	U	5.00
Chloroform	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,1-Dichloropropene	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,2-Dichloroethane	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,1,1-Trichloroethane	U	5.00	U	5.00	U	2500	U	100	U	5.00
Carbon Tetrachloride	U	5.00	U	5.00	U	2500	U	100	U	5.00
Benzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
Trichloroethene	U	5.00	U	5.00	8130	2500	1110	100	U	5.00
1,2-Dichloropropane	U	5.00	U	5.00	U	2500	U	100	U	5.00
Bromodichloromethane	U	5.00	U	5.00	U	2500	U	100	U	5.00
Dibromomethane	U	5.00	U	5.00	U	2500	U	100	U	5.00
cis-1,3-Dichloropropene	U	5.00	U	5.00	U	2500	U	100	U	5.00
trans-1,3-Dichloropropene	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,1,2-Trichloroethane	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,3-Dichloropropane	U	5.00	U	5.00	U	2500	U	100	U	5.00
Dibromochloromethane	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,2-Dibromoethane	U	5.00	U	5.00	U	2500	U	100	U	5.00
Bromoform	U	27.1	U	27.1	U	13600	U	542	U	27.1
4-Methyl-2-pentanone	U	5.00	U	5.00	U	2500	U	100	U	5.00
Toluene	U	5.00	U	5.00	U	2500	U	100	U	5.00
2-Hexanone	U	5.00	U	5.00	U	2500	U	100	U	5.00
Tetrachloroethene	U	5.00	U	5.00	88900	10000	764	100	6.47	5.00
Chlorobenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,1,1,2-Tetrachloroethane	U	5.00	U	5.00	U	2500	U	100	U	5.00
Ethylbenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
o&m-Xylene	U	10.0	U	10.0	U	5000	U	200	U	10.0
o-Xylene	U	5.00	U	5.00	U	2500	U	100	U	5.00
Styrene	U	37.8	U	37.8	U	18900	U	756	U	37.8
isopropylbenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,1,2,2-Tetrachloroethane	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,2,3-Trichloropropane	U	5.00	U	5.00	U	2500	U	100	U	5.00
n-Propylbenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
Bromobenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,3,5-Trimethylbenzene	U	32.8	U	32.8	U	16400	U	656	U	32.8
2-Chlorotoluene	U	5.00	U	5.00	U	2500	U	100	U	5.00
4-Chlorotoluene	U	5.00	U	5.00	U	2500	U	100	U	5.00
tert-Butylbenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,2,4-Trimethylbenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
sec-Butylbenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
p-Isopropyltoluene	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,3-Dichlorobenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,4-Dichlorobenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
n-Butylbenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,2-Dichlorobenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,2-Dibromo-3-chloropropane	U	12.5	U	12.5	U	6250	U	250	U	12.5
1,2,4-Trichlorobenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00
hexachlorobutadiene	U	5.00	U	5.00	U	2500	U	100	U	5.00
naphthalene	U	5.00	U	5.00	U	2500	U	100	U	5.00
1,2,3-Trichlorobenzene	U	5.00	U	5.00	U	2500	U	100	U	5.00

rv2096

Table 1.1 (cont.) Result of the Analysis for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Method : REAC SOP 1806

Page 2 of 8

Sample Number:
Sample Location:

Water Blank A 041106-2

19467
Field Blank

Analyte	Result µg/L	RL µg/L	Result µg/L	RL µg/L
Dichlorodifluoromethane	U	8.32	U	8.32
Chloromethane	U	5.00	U	5.00
Vinyl Chloride	U	5.00	U	5.00
Bromomethane	U	J 5.00	U	J 5.00
Chloroethane	U	32.5	U	32.5
Trichlorofluoromethane	U	J 52.2	U	J 52.2
Acetone	U	20.0	U	20.0
1,1-Dichloroethene	U	5.00	U	5.00
Methylene Chloride	U	5.00	U	5.00
Carbon Disulfide	U	5.00	U	5.00
Methyl-t-butyl Ether	U	5.00	U	5.00
trans-1,2-Dichloroethene	U	5.00	U	5.00
1,1-Dichloroethane	U	5.00	U	5.00
2-Butanone	U	5.00	U	5.00
2,2-Dichloropropane	U	5.00	U	5.00
cis-1,2-Dichloroethene	U	5.00	U	5.00
Chloroform	U	5.00	U	5.00
1,1-Dichloropropene	U	5.00	U	5.00
1,2-Dichloroethane	U	5.00	U	5.00
1,1,1-Trichloroethane	U	5.00	U	5.00
Carbon Tetrachloride	U	5.00	U	5.00
Benzene	U	5.00	U	5.00
Trichloroethene	U	5.00	U	5.00
1,2-Dichloropropane	U	5.00	U	5.00
Bromodichloromethane	U	5.00	U	5.00
Dibromomethane	U	5.00	U	5.00
cis-1,3-Dichloropropene	U	5.00	U	5.00
trans-1,3-Dichloropropene	U	5.00	U	5.00
1,1,2-Trichloroethane	U	5.00	U	5.00
1,3-Dichloropropane	U	5.00	U	5.00
Dibromochloromethane	U	5.00	U	5.00
1,2-Dibromoethane	U	5.00	U	5.00
Bromoform	U	27.1	U	27.1
4-Methyl-2-pentanone	U	5.00	U	5.00
Toluene	U	5.00	U	5.00
2-Hexanone	U	5.00	U	5.00
Tetrachloroethene	U	5.00	5.26	5.00
Chlorobenzene	U	5.00	U	5.00
1,1,1,2-Tetrachloroethane	U	5.00	U	5.00
Ethylbenzene	U	5.00	U	5.00
p&m-Xylene	U	10.0	U	10.0
o-Xylene	U	5.00	U	5.00
Styrene	U	37.8	U	37.8
Isopropylbenzene	U	5.00	U	5.00
1,1,2,2-Tetrachloroethane	U	5.00	U	5.00
1,2,3-Trichloropropane	U	5.00	U	5.00
n-Propylbenzene	U	5.00	U	5.00
Bromobenzene	U	5.00	U	5.00
1,3,5-Trimethylbenzene	U	32.8	U	32.8
2-Chlorotoluene	U	5.00	U	5.00
4-Chlorotoluene	U	5.00	U	5.00
tert-Butylbenzene	U	5.00	U	5.00
1,2,4-Trimethylbenzene	U	5.00	U	5.00
sec-Butylbenzene	U	5.00	U	5.00
p-Isopropyltoluene	U	5.00	U	5.00
1,3-Dichlorobenzene	U	5.00	U	5.00
1,4-Dichlorobenzene	U	5.00	U	5.00
n-Butylbenzene	U	5.00	U	5.00
1,2-Dichlorobenzene	U	5.00	U	5.00
1,2-Dibromo-3-chloropropane	U	12.5	U	12.5
1,2,4-Trichlorobenzene	U	5.00	U	5.00
Hexachlorobutadiene	U	5.00	U	5.00
Naphthalene	U	5.00	U	5.00
1,2,3-Trichlorobenzene	U	5.00	U	5.00

rv2097

Table 1.1 (cont.) Result of the Analysis for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Method : REAC SOP 1806

Page 3 of 8

Sample Number:	Water Blank A 041206-2		19450		19451		19452		19463	
Sample Location:			MW33		MW30		MW21		MW35	
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	8.32	U	16.6	U	16.6	U	8.32	U	8.32
Chloromethane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Vinyl Chloride	U	5.00	U	10.0	U	10.0	2.61	5.00	7.93	5.00
Bromomethane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Chloroethane	U	32.5	U	65.0	U	65.0	U	32.5	U	32.5
Trichlorofluoromethane	U	52.2	U	104	U	104	U	52.2	U	52.2
Acetone	U	20.0	U	40.0	U	40.0	U	20.0	U	20.0
1,1-Dichloroethene	U	5.00	U	10.0	U	10.0	U	5.00	12.1	5.00
Methylene Chloride	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Carbon Disulfide	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Methyl-t-butyl Ether	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
trans-1,2-Dichloroethene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,1-Dichloroethane	U	5.00	U	10.0	U	10.0	U	5.00	14.0	5.00
2-Butanone	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
2,2-Dichloropropane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
cis-1,2-Dichloroethene	U	5.00	U	10.0	U	10.0	78.5	5.00	10.3	5.00
Chloroform	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,1-Dichloropropene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,2-Dichloroethane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,1,1-Trichloroethane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Carbon Tetrachloride	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Benzene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Trichloroethene	U	5.00	4.21	10.0	U	10.0	4.13	5.00	5.51	5.00
1,2-Dichloropropane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Bromodichloromethane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Dibromomethane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
cis-1,3-Dichloropropene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
trans-1,3-Dichloropropene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,1,2-Trichloroethane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,3-Dichloropropane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Dibromochloromethane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,2-Dibromoethane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Bromoform	U	27.1	U	54.2	U	54.2	U	27.1	U	27.1
4-Methyl-2-pentanone	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Toluene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
2-Hexanone	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Tetrachloroethene	3.42	5.00	U	54.2	U	54.2	U	5.00	U	15.0
Chlorobenzene	U	5.00	U	10.0	U	10.0	U	5.00	3.36	5.00
1,1,1,2-Tetrachloroethane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Ethylbenzene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
p&m-Xylene	U	10.0	U	20.0	U	20.0	U	10.0	U	10.0
o-Xylene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Styrene	U	37.8	U	75.6	U	75.6	U	37.8	U	37.8
Isopropylbenzene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,1,2,2-Tetrachloroethane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,2,3-Trichloropropane	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
n-Propylbenzene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Bromobenzene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,3,5-Trimethylbenzene	U	32.8	U	65.6	U	65.6	U	32.8	U	32.8
2-Chlorotoluene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
4-Chlorotoluene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
tert-Butylbenzene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,2,4-Trimethylbenzene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
sec-Butylbenzene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
p-Isopropyltoluene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,3-Dichlorobenzene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,4-Dichlorobenzene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
n-Butylbenzene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,2-Dichlorobenzene	U	5.00	U	10.0	U	10.0	U	5.00	1.34	5.00
1,2-Dibromo-3-chloropropane	U	12.5	U	25.0	U	25.0	U	12.5	U	12.5
1,2,4-Trichlorobenzene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Hexachlorobutadiene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
Naphthalene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00
1,2,3-Trichlorobenzene	U	5.00	U	10.0	U	10.0	U	5.00	U	5.00

rv2098

Table 1.1 (cont.) Result of the Analysis for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Method : REAC SOP 1806

Page 4 of 8

Sample Number:	Water Blank A 041206-2		19464		19453		19454		19455	
Sample Location:			MW36		MW17		MW2		MW2 (Dup)	
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	8.32	U	8.32	U	1660	U	4160	U	4160
Chloromethane	U	5.00	U	5.00	U	1000	U	2500	U	2500
Vinyl Chloride	U	5.00	2.15	5.00	2750	1000	U	2500	U	2500
Bromomethane	U	5.00	U	5.00	U	1000	U	2500	U	2500
Chloroethane	U	32.5	U	32.5	U	6500	U	16300	U	16300
Trichlorofluoromethane	U	52.2	U	52.2	U	10400	U	26100	U	26100
Acetone	U	20.0	U	20.0	U	4000	U	10000	U	10000
1,1-Dichloroethene	U	5.00	2.70	5.00	U	1000	U	2500	U	2500
Methylene Chloride	U	5.00	U	5.00	U	1000	U	2500	U	2500
Carbon Disulfide	U	5.00	U	5.00	U	1000	U	2500	U	2500
Methyl-t-butyl Ether	U	5.00	U	5.00	U	1000	U	2500	U	2500
trans-1,2-Dichloroethene	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,1-Dichloroethane	U	5.00	1.96	5.00	U	1000	U	2500	U	2500
2-Butanone	U	5.00	U	5.00	U	1000	U	2500	U	2500
2,2-Dichloropropane	U	5.00	U	5.00	U	1000	U	2500	U	2500
cis-1,2-Dichloroethene	U	5.00	2.01	5.00	17400	1000	1260	2500	1130	2500
Chloroform	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,1-Dichloropropene	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,2-Dichloroethane	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,1,1-Trichloroethane	U	5.00	U	5.00	U	1000	U	2500	U	2500
Carbon Tetrachloride	U	5.00	U	5.00	U	1000	U	2500	U	2500
Benzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
Trichloroethene	U	5.00	U	5.00	5950	1000	3480	2500	3350	2500
1,2-Dichloropropane	U	5.00	U	5.00	U	1000	U	2500	U	2500
Bromodichloromethane	U	5.00	U	5.00	U	1000	U	2500	U	2500
Dibromomethane	U	5.00	U	5.00	U	1000	U	2500	U	2500
cis-1,3-Dichloropropene	U	5.00	U	5.00	U	1000	U	2500	U	2500
trans-1,3-Dichloropropene	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,1,2-Trichloroethane	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,3-Dichloropropane	U	5.00	U	5.00	U	1000	U	2500	U	2500
Dibromochloromethane	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,2-Dibromoethane	U	5.00	U	5.00	U	1000	U	2500	U	2500
Bromoform	U	27.1	U	27.1	U	5420	U	13600	U	13600
4-Methyl-2-pentanone	U	5.00	U	5.00	U	1000	U	2500	U	2500
Toluene	U	5.00	U	5.00	U	1000	U	2500	U	2500
2-Hexanone	U	5.00	U	5.00	U	1000	U	2500	U	2500
Tetrachloroethene	3.42	5.00	U	5.00	U	5310	U	15100	U	15400
Chlorobenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,1,1,2-Tetrachloroethane	U	5.00	U	5.00	U	1000	U	2500	U	2500
Ethylbenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
p&m-Xylene	U	10.0	U	10.0	U	2000	U	5000	U	5000
o-Xylene	U	5.00	U	5.00	U	1000	U	2500	U	2500
Styrene	U	37.8	U	37.8	U	7560	U	18900	U	18900
Isopropylbenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,1,2,2-Tetrachloroethane	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,2,3-Trichloropropane	U	5.00	U	5.00	U	1000	U	2500	U	2500
n-Propylbenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
Bromobenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,3,5-Trimethylbenzene	U	32.8	U	32.8	U	6500	U	16400	U	16400
2-Chlorotoluene	U	5.00	U	5.00	U	1000	U	2500	U	2500
4-Chlorotoluene	U	5.00	U	5.00	U	1000	U	2500	U	2500
tert-Butylbenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,2,4-Trimethylbenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
sec-Butylbenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
p-Isopropyltoluene	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,3-Dichlorobenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,4-Dichlorobenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
n-Butylbenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,2-Dichlorobenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,2-Dibromo-3-chloropropane	U	12.5	U	12.5	U	2500	U	6250	U	6250
1,2,4-Trichlorobenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500
Hexachlorobutadiene	U	5.00	U	5.00	U	1000	U	2500	U	2500
Naphthalene	U	5.00	U	5.00	U	1000	U	2500	U	2500
1,2,3-Trichlorobenzene	U	5.00	U	5.00	U	1000	U	2500	U	2500

rv2099

Table 1.1 (cont.) Result of the Analysis for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Method : REAC SOP 1806

Page 5 of 8

Sample Number:	Water Blank A 041206-2		19457 MW5		19465 MW37	
Sample Location:						
Analyte	Result µg/L	RL µg/L	Result µg/L	RL µg/L	Result µg/L	RL µg/L
Dichlorodifluoromethane	U	8.32	U	1660	U	3320
Chloromethane	U	5.00	U	1000	U	2000
Vinyl Chloride	U	5.00	3780	1000	U	2000
Bromomethane	U	J 5.00	U	J 1000	U	J 2000
Chloroethane	U	32.5	U	6500	U	13000
Trichlorofluoromethane	U	52.2	U	10400	U	20800
Acetone	U	20.0	U	4000	U	8000
1,1-Dichloroethene	U	5.00	U	1000	U	2000
Methylene Chloride	U	5.00	U	1000	U	2000
Carbon Disulfide	U	5.00	U	1000	U	2000
Methyl-t-butyl Ether	U	5.00	U	1000	U	2000
trans-1,2-Dichloroethene	U	5.00	U	1000	U	2000
1,1-Dichloroethane	U	5.00	U	1000	U	2000
2-Butanone	U	5.00	U	1000	U	2000
2,2-Dichloropropane	U	5.00	U	1000	U	2000
cis-1,2-Dichloroethene	U	5.00	30200	1000	1530	J 2000
Chloroform	U	5.00	U	1000	U	2000
1,1-Dichloropropene	U	5.00	U	1000	U	2000
1,2-Dichloroethane	U	5.00	U	1000	U	2000
1,1,1-Trichloroethane	U	5.00	U	1000	U	2000
Carbon Tetrachloride	U	5.00	U	1000	U	2000
Benzene	U	5.00	U	1000	U	2000
Trichloroethene	U	5.00	1570	1000	4000	2000
1,2-Dichloropropane	U	5.00	U	1000	U	2000
Bromodichloromethane	U	5.00	U	1000	U	2000
Dibromomethane	U	5.00	U	1000	U	2000
cis-1,3-Dichloropropene	U	5.00	U	1000	U	2000
trans-1,3-Dichloropropene	U	5.00	U	1000	U	2000
1,1,2-Trichloroethane	U	5.00	U	1000	U	2000
1,3-Dichloropropane	U	5.00	U	1000	U	2000
Dibromochloromethane	U	5.00	U	1000	U	2000
1,2-Dibromoethane	U	5.00	U	1000	U	2000
Bromoform	U	27.1	U	5420	U	10800
4-Methyl-2-pentanone	U	5.00	U	1000	U	2000
Toluene	U	5.00	U	1000	U	2000
2-Hexanone	U	5.00	U	1000	U	2000
Tetrachloroethene	3.42	J 5.00	6950	1000	14400	2000
Chlorobenzene	U	5.00	U	1000	U	2000
1,1,1,2-Tetrachloroethane	U	5.00	U	1000	U	2000
Ethylbenzene	U	5.00	U	1000	U	2000
p&m-Xylene	U	10.0	U	2000	U	4000
o-Xylene	U	5.00	U	1000	U	2000
Styrene	U	37.8	U	7560	U	15100
Isopropylbenzene	U	5.00	U	1000	U	2000
1,1,2,2-Tetrachloroethane	U	5.00	U	1000	U	2000
1,2,3-Trichloropropane	U	5.00	U	1000	U	2000
n-Propylbenzene	U	5.00	U	1000	U	2000
Bromobenzene	U	5.00	U	1000	U	2000
1,3,5-Trimethylbenzene	U	32.8	U	6500	U	13100
2-Chlorotoluene	U	5.00	U	1000	U	2000
4-Chlorotoluene	U	5.00	U	1000	U	2000
tert-Butylbenzene	U	5.00	U	1000	U	2000
1,2,4-Trimethylbenzene	U	5.00	U	1000	U	2000
sec-Butylbenzene	U	5.00	U	1000	U	2000
p-Isopropyltoluene	U	5.00	U	1000	U	2000
1,3-Dichlorobenzene	U	5.00	U	1000	U	2000
1,4-Dichlorobenzene	U	5.00	U	1000	U	2000
n-Butylbenzene	U	5.00	U	1000	U	2000
1,2-Dichlorobenzene	U	5.00	U	1000	U	2000
1,2-Dibromo-3-chloropropane	U	12.5	U	2500	U	5000
1,2,4-Trichlorobenzene	U	5.00	U	1000	U	2000
Hexachlorotadiene	U	5.00	U	1000	U	2000
Naphthalene	U	5.00	U	1000	U	2000
1,2,3-Trichlorobenzene	U	5.00	U	1000	U	2000

rv2100

Table 1.1(cont.) Result of the Analysis for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Method : REAC SOP 1806

Page 6 of 8

Sample Number:	Water Blank 041306-1				19476		19477		19466		19474	
Sample Location:					Field Blank		Trip Blank		MW38		MW29	
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	Result µg/L	RL µg/L
Dichlorodifluoromethane	U	8.32	U	8.32	U	8.32	U		16600		U	83.2
Chloromethane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Vinyl Chloride	U	5.00	U	5.00	U	5.00	3900	J	10000		U	50.0
Bromomethane	U	5.00	U	5.00	U	5.00	U	J	10000		U	50.0
Chloroethane	U	32.5	U	32.5	U	32.5	U	J	65000		U	325
Trichlorofluoromethane	U	52.2	U	52.2	U	52.2	U		104000		U	522
Acetone	U	20.0	U	20.0	U	20.0	U		40000		U	200
1,1-Dichloroethene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Methylene Chloride	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Carbon Disulfide	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Methyl-t-butyl Ether	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
trans-1,2-Dichloroethene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,1-Dichloroethane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
2-Butanone	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
2,2-Dichloropropane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
cis-1,2-Dichloroethene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Chloroform	U	5.00	U	5.00	U	5.00	32800		10000		U	50.0
1,1-Dichloropropene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,2-Dichloroethane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,1,1-Trichloroethane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Carbon Tetrachloride	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Benzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Trichloroethene	U	5.00	U	5.00	U	5.00	34200		10000		U	50.0
1,2-Dichloropropane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Bromodichloromethane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Dibromomethane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
cis-1,3-Dichloropropene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
trans-1,3-Dichloropropene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,1,2-Trichloroethane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,3-Dichloropropane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Dibromochloromethane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,2-Dibromoethane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Bromoform	U	27.1	U	27.1	U	27.1	U		54200		U	271
4-Methyl-2-pentanone	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Toluene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
2-Hexanone	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Tetrachloroethene	U	5.00	U	5.00	U	5.00	35900		10000		U	50.0
Chlorobenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,1,1,2-Tetrachloroethane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Ethylbenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
o&m-Xylene	U	10.0	U	10.0	U	10.0	U		20000		U	100
p-Xylene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Styrene	U	37.8	U	37.8	U	37.8	U		75600		U	378
Isopropylbenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,1,2,2-Tetrachloroethane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,2,3-Trichloropropane	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
n-Propylbenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Bromobenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,3,5-Trimethylbenzene	U	32.8	U	32.8	U	32.8	U		65000		U	328
2-Chlorotoluene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
4-Chlorotoluene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
tert-Butylbenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,2,4-Trimethylbenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
sec-Butylbenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
p-Isopropyltoluene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,3-Dichlorobenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,4-Dichlorobenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
n-Butylbenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,2-Dichlorobenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,2-Dibromo-3-chloropropane	U	12.5	U	12.5	U	12.5	U		250000		U	125
1,2,4-Trichlorobenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Hexachlorobutadiene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
Naphthalene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0
1,2,3-Trichlorobenzene	U	5.00	U	5.00	U	5.00	U		10000		U	50.0

rv2101

Table 1.1 (cont.) Result of the Analysis for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Method : REAC SOP 1806

Page 7 of 8

Sample Number:	Water Blank 041306-1		19462		19470		19471		19472	
Sample Location:			MW34		MW39		MW39Dup		MW40	
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	8.32	U	8.32	U	16600	U	16600	U	1660
Chloromethane	U	5.00	U	5.00	U	10000	U	10000	U	1000
Vinyl Chloride	U	5.00	23.3	5.00	19200	10000	10500	10000	276	1000
Bromomethane	U	5.00	U	5.00	U	10000	U	10000	U	1000
Chloroethane	U	32.5	U	32.5	U	65000	U	65000	U	6500
Trichlorofluoromethane	U	52.2	U	52.2	U	104000	U	104000	U	10400
Acetone	U	20.0	U	20.0	U	40000	U	40000	U	4000
1,1-Dichloroethene	U	5.00	U	5.00	U	10000	U	10000	U	1000
Methylene Chloride	U	5.00	U	5.00	U	10000	U	10000	U	1000
Carbon Disulfide	U	5.00	U	5.00	U	10000	U	10000	U	1000
Methyl-t-butyl Ether	U	5.00	U	5.00	U	10000	U	10000	U	1000
trans-1,2-Dichloroethene	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,1-Dichloroethane	U	5.00	U	5.00	U	10000	U	10000	U	1000
2-Butanone	U	5.00	U	5.00	U	10000	U	10000	U	1000
2,2-Dichloropropane	U	5.00	U	5.00	U	10000	U	10000	U	1000
cis-1,2-Dichloroethene	U	5.00	28.4	5.00	100000	10000	80900	10000	1550	1000
Chloroform	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,1-Dichloropropene	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,2-Dichloroethane	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,1,1-Trichloroethane	U	5.00	U	5.00	U	10000	U	10000	U	1000
Carbon Tetrachloride	U	5.00	U	5.00	U	10000	U	10000	U	1000
Benzene	U	5.00	U	5.00	U	10000	U	10000	U	1000
Trichloroethene	U	5.00	19.6	5.00	10900	10000	7890	10000	1210	1000
1,2-Dichloropropane	U	5.00	U	5.00	U	10000	U	10000	U	1000
Bromodichloromethane	U	5.00	U	5.00	U	10000	U	10000	U	1000
Dibromomethane	U	5.00	U	5.00	U	10000	U	10000	U	1000
cis-1,3-Dichloropropene	U	5.00	U	5.00	U	10000	U	10000	U	1000
trans-1,3-Dichloropropene	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,1,2-Trichloroethane	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,3-Dichloropropane	U	5.00	U	5.00	U	10000	U	10000	U	1000
Dibromochloromethane	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,2-Dibromoethane	U	5.00	U	5.00	U	10000	U	10000	U	1000
Bromoform	U	27.1	U	27.1	U	54200	U	54200	U	5420
4-Methyl-2-pentanone	U	5.00	U	5.00	U	10000	U	10000	U	1000
Toluene	U	5.00	U	5.00	U	10000	U	10000	U	1000
2-Hexanone	U	5.00	U	5.00	U	10000	U	10000	U	1000
Tetrachloroethene	U	5.00	48.1	5.00	67300	10000	56700	10000	7010	1000
Chlorobenzene	U	5.00	10.2	5.00	U	10000	U	10000	U	1000
1,1,1,2-Tetrachloroethane	U	5.00	U	5.00	U	10000	U	10000	U	1000
Ethylbenzene	U	5.00	U	5.00	U	10000	U	10000	U	1000
p&m-Xylene	U	10.0	U	10.0	U	20000	U	20000	U	2000
o-Xylene	U	5.00	U	5.00	U	10000	U	10000	U	1000
Styrene	U	37.8	U	37.8	U	75600	U	75600	U	7560
Isopropylbenzene	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,1,2,2-Tetrachloroethane	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,2,3-Trichloropropane	U	5.00	U	5.00	U	10000	U	10000	U	1000
n-Propylbenzene	U	5.00	U	5.00	U	10000	U	10000	U	1000
Bromobenzene	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,3,5-Trimethylbenzene	U	32.8	U	32.8	U	65000	U	65000	U	6500
2-Chlorotoluene	U	5.00	U	5.00	U	10000	U	10000	U	1000
4-Chlorotoluene	U	5.00	U	5.00	U	10000	U	10000	U	1000
tert-Butylbenzene	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,2,4-Trimethylbenzene	U	5.00	U	5.00	U	10000	U	10000	U	1000
sec-Butylbenzene	U	5.00	U	5.00	U	10000	U	10000	U	1000
p-Isopropyltoluene	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,3-Dichlorobenzene	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,4-Dichlorobenzene	U	5.00	U	5.00	U	10000	U	10000	U	1000
n-Butylbenzene	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,2-Dichlorobenzene	U	5.00	4.60	5.00	U	10000	U	10000	U	1000
1,2-Dibromo-3-chloropropane	U	12.5	U	12.5	U	25000	U	25000	U	2500
1,2,4-Trichlorobenzene	U	5.00	U	5.00	U	10000	U	10000	U	1000
Hexachlorobutadiene	U	5.00	U	5.00	U	10000	U	10000	U	1000
Naphthalene	U	5.00	U	5.00	U	10000	U	10000	U	1000
1,2,3-Trichlorobenzene	U	5.00	U	5.00	U	10000	U	10000	U	1000

rv2102

Table 1.1 (cont.) Results of the Analysis for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Method : REAC SOP 1806

Page 8 of 8

Sample Number:	Water Blank 041306-1		19473		Water Blank A 041406-1		19475	
Sample Location:			MW41				MW16	
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
Dichlorodifluoromethane	U	8.32	U	16600	U	8.32	U	1660
Chloromethane	U	5.00	U	10000	U	5.00	U	1000
Vinyl Chloride	U	5.00	33000	10000	U	5.00	1790	1000
Bromomethane	U	5.00	U	10000	U	5.00	U	1000
Chloroethane	U	32.5	U	65000	U	32.5	U	6500
Trichlorofluoromethane	U	52.2	U	104000	U	52.2	U	10400
Acetone	U	20.0	U	40000	8.93	20.0	U	4000
1,1-Dichloroethene	U	5.00	U	10000	U	5.00	U	1000
Methylene Chloride	U	5.00	U	10000	U	5.00	U	1000
Carbon Disulfide	U	5.00	U	10000	U	5.00	U	1000
Methyl-t-butyl Ether	U	5.00	U	10000	U	5.00	U	1000
trans-1,2-Dichloroethene	U	5.00	U	10000	U	5.00	U	1000
1,1-Dichloroethane	U	5.00	U	10000	U	5.00	U	1000
2-Butanone	U	5.00	U	10000	U	5.00	U	1000
2,2-Dichloropropane	U	5.00	U	10000	U	5.00	U	1000
cis-1,2-Dichloroethene	U	5.00	323000	10000	U	5.00	3560	1000
Chloroform	U	5.00	U	10000	U	5.00	U	1000
1,1-Dichloropropene	U	5.00	U	10000	U	5.00	U	1000
1,2-Dichloroethane	U	5.00	U	10000	U	5.00	U	1000
1,1,1-Trichloroethane	U	5.00	U	10000	U	5.00	U	1000
Carbon Tetrachloride	U	5.00	U	10000	U	5.00	U	1000
Benzene	U	5.00	U	10000	U	5.00	U	1000
Trichloroethene	U	5.00	42900	10000	U	5.00	3280	1000
1,2-Dichloropropane	U	5.00	U	10000	U	5.00	U	1000
Bromodichloromethane	U	5.00	U	10000	U	5.00	U	1000
Dibromomethane	U	5.00	U	10000	U	5.00	U	1000
cis-1,3-Dichloropropene	U	5.00	U	10000	U	5.00	U	1000
trans-1,3-Dichloropropene	U	5.00	U	10000	U	5.00	U	1000
1,1,2-Trichloroethane	U	5.00	U	10000	U	5.00	U	1000
1,3-Dichloropropane	U	5.00	U	10000	U	5.00	U	1000
Dibromochloromethane	U	5.00	U	10000	U	5.00	U	1000
1,2-Dibromoethane	U	5.00	U	10000	U	5.00	U	1000
Bromoform	U	27.1	U	54200	U	27.1	U	5420
4-Methyl-2-pentanone	U	5.00	U	10000	U	5.00	U	1000
Toluene	U	5.00	U	10000	U	5.00	U	1000
2-Hexanone	U	5.00	U	10000	U	5.00	U	1000
Tetrachloroethene	U	5.00	68600	10000	U	5.00	8410	1000
Chlorobenzene	U	5.00	U	10000	U	5.00	U	1000
1,1,1,2-Tetrachloroethane	U	5.00	U	10000	U	5.00	U	1000
Ethylbenzene	U	5.00	U	10000	U	5.00	U	1000
p&m-Xylene	U	10.0	U	20000	U	10.0	U	2000
o-Xylene	U	5.00	U	10000	U	5.00	U	1000
Styrene	U	37.8	U	75600	U	37.8	U	7560
Isopropylbenzene	U	5.00	U	10000	U	5.00	U	1000
1,1,2,2-Tetrachloroethane	U	5.00	U	10000	U	5.00	U	1000
1,2,3-Trichloropropane	U	5.00	U	10000	U	5.00	U	1000
n-Propylbenzene	U	5.00	U	10000	U	5.00	U	1000
Bromobenzene	U	5.00	U	10000	U	5.00	U	1000
1,3,5-Trimethylbenzene	U	32.8	U	65000	U	32.8	U	6500
2-Chlorotoluene	U	5.00	U	10000	U	5.00	U	1000
4-Chlorotoluene	U	5.00	U	10000	U	5.00	U	1000
tert-Butylbenzene	U	5.00	U	10000	U	5.00	U	1000
1,2,4-Trimethylbenzene	U	5.00	U	10000	U	5.00	U	1000
sec-Butylbenzene	U	5.00	U	10000	U	5.00	U	1000
p-Isopropyltoluene	U	5.00	U	10000	U	5.00	U	1000
1,3-Dichlorobenzene	U	5.00	U	10000	U	5.00	U	1000
1,4-Dichlorobenzene	U	5.00	U	10000	U	5.00	U	1000
n-Butylbenzene	U	5.00	U	10000	U	5.00	U	1000
1,2-Dichlorobenzene	U	5.00	U	10000	U	5.00	U	1000
1,2-Dibromo-3-chloropropane	U	12.5	U	25000	U	12.5	U	2500
1,2,4-Trichlorobenzene	U	5.00	U	10000	U	5.00	U	1000
Hexachlorobutadiene	U	5.00	U	10000	U	5.00	U	1000
Naphthalene	U	5.00	U	10000	U	5.00	U	1000
1,2,3-Trichlorobenzene	U	5.00	U	10000	U	5.00	U	1000

rv2103

rv2104

Table 1.2 Result of TIC for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Sample #	Compound
Water Blank 041106-2 Sys.A)	No TICs Found
19458	No TICs Found
19460/500x	No TICs Found
19456/20x	No TICs Found
19459	No TICs Found
19467	No TICs Found
Water Blank 041206-2 Sys.A)	No TICs Found
19450/2x	No TICs Found
19451/2x	No TICs Found
19452	No TICs Found
19463	No TICs Found
19464	No TICs Found
19453/200x	No TICs Found
19454/500x	No TICs Found
19455/500x	No TICs Found
19457/200x	No TICs Found
19465/400x	No TICs Found
Water Blank 041306-1 Sys.A)	No TICs Found
19476	No TICs Found
19477	No TICs Found
19466/2000x	No TICs Found
19474/10x	No TICs Found
19462	No TICs Found
19470/2000x	No TICs Found
19471/2000x	No TICs Found
19472/200x	No TICs Found
19473/2000x	No TICs Found
Water Blank 041406-1 Sys.A)	No TICs Found
19475/200x	No TICs Found

Table 1.3 Results of the Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Method : REAC SOP 1807

Page 1 of 10

Sample Number :	MeOH Blank A 040605-1		19433		19434		19426		19429	
Sample Location:			MW39 6.5'-7.0'		MW39 9.5'-10.0'		MW37 13.0'-13.5'		MW38 7.5'-8.0'	
% Solid :	100		77		79		76		76	
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	416	U	540000	U	105000	U	1090	U	2190
Chloromethane	U	250	U	32500	U	63300	U	658	U	1320
Vinyl Chloride	U	250	U	32500	U	63300	U	658	U	1320
Bromomethane	U	250	U	32500	U	63300	U	658	U	1320
Chloroethane	U	1630	U	211000	U	412000	U	4280	U	8560
Trichlorofluoromethane	U	4650	U	610000	U	1190000	U	12400	U	24700
Acetone	U	1000	U	130000	U	253000	U	2630	U	5260
1,1-Dichloroethene	U	250	U	32500	U	63300	U	658	U	1320
Methylene Chloride	U	250	U	32500	U	63300	210	658	U	1320
Carbon Disulfide	U	250	U	32500	U	63300	U	658	U	1320
Methyl-t-butyl Ether	U	250	U	32500	U	63300	U	658	U	1320
trans-1,2-Dichloroethene	U	250	U	32500	U	63300	U	658	U	1320
1,1-Dichloroethane	U	250	U	32500	U	63300	U	658	U	1320
2-Butanone	U	250	U	32500	U	63300	U	658	U	1320
2,2-Dichloropropane	U	250	U	32500	U	63300	U	658	U	1320
cis-1,2-Dichloroethene	U	250	24100	32500	28800	63300	388	658	9820	1320
Chloroform	U	250	U	32500	U	63300	U	658	U	1320
1,1-Dichloropropene	U	250	U	32500	U	63300	U	658	U	1320
1,2-Dichloroethane	U	250	U	32500	U	63300	U	658	U	1320
1,1,1-Trichloroethane	U	250	U	32500	U	63300	U	658	U	1320
Carbon Tetrachloride	U	250	U	32500	U	63300	U	658	U	1320
Benzene	U	250	U	32500	U	63300	U	658	U	1320
Trichloroethene	U	250	31100	32500	U	63300	748	658	6950	1320
1,2-Dichloropropane	U	250	U	32500	U	63300	U	658	U	1320
Bromodichloromethane	U	250	U	32500	U	63300	U	658	U	1320
Dibromomethane	U	250	U	32500	U	63300	U	658	U	1320
cis-1,3-Dichloropropene	U	250	U	32500	U	63300	U	658	U	1320
trans-1,3-Dichloropropene	U	250	U	32500	U	63300	U	658	U	1320
1,1,2-Trichloroethane	U	250	U	32500	U	63300	U	658	U	1320
1,3-Dichloropropane	U	250	U	32500	U	63300	U	658	U	1320
Dibromochloromethane	U	250	U	32500	U	63300	U	658	U	1320
1,2-Dibromoethane	U	250	U	32500	U	63300	U	658	U	1320
Bromoform	U	1350	U	178000	U	343000	U	3560	U	7130
4-Methyl-2-pentanone	U	250	U	32500	U	63300	U	658	U	1320
Toluene	U	250	U	32500	U	63300	U	658	U	1320
2-Hexanone	U	250	U	32500	U	63300	U	658	U	1320
Tetrachloroethene	U	250	2620000	130000	571000	63300	1580	658	18000	1320
Chlorobenzene	U	250	U	32500	U	63300	U	658	U	1320
1,1,1,2-Tetrachloroethane	U	250	U	32500	U	63300	U	658	U	1320
Ethylbenzene	U	250	U	32500	U	63300	U	658	U	1320
p&m-Xylene	U	500	U	64900	U	127000	U	1320	U	2630
o-Xylene	U	250	U	32500	U	63300	U	658	U	1320
Styrene	U	250	U	32500	U	63300	U	658	U	1320
Isopropylbenzene	U	250	U	32500	U	63300	U	658	U	1320
1,1,2,2-Tetrachloroethane	U	250	U	32500	U	63300	U	658	U	1320
1,2,3-Trichloropropane	U	250	U	32500	U	63300	U	658	U	1320
n-Propylbenzene	U	250	U	32500	U	63300	U	658	U	1320
Bromobenzene	U	250	U	32500	U	63300	U	658	U	1320
1,3,5-Trimethylbenzene	U	1640	U	213000	U	415000	U	4310	U	8620
2-Chlorotoluene	U	250	U	32500	U	63300	U	658	U	1320
4-Chlorotoluene	U	250	U	32500	U	63300	U	658	U	1320
tert-Butylbenzene	U	250	U	32500	U	63300	U	658	U	1320
1,2,4-Trimethylbenzene	U	250	U	32500	U	63300	U	658	U	1320
sec-Butylbenzene	U	250	U	32500	U	63300	U	658	U	1320
p-Isopropyltoluene	U	250	U	32500	U	63300	U	658	U	1320
1,3-Dichlorobenzene	U	250	U	32500	U	63300	U	658	U	1320
1,4-Dichlorobenzene	U	250	U	32500	U	63300	U	658	U	1320
n-Butylbenzene	U	250	U	32500	U	63300	U	658	U	1320
1,2-Dichlorobenzene	U	250	U	32500	U	63300	U	658	U	1320
1,2-Dibromo-3-chloropropan	U	626	U	81300	U	158000	U	1650	U	3290
1,2,4-Trichlorobenzene	U	250	U	32500	U	63300	U	658	U	1320
Hexachlorobutadiene	U	250	U	32500	U	63300	U	658	U	1320
Naphthalene	U	250	U	32500	U	63300	U	658	U	1320
1,2,3-Trichlorobenzene	U	250	U	32500	U	63300	U	658	U	1320

rv2085

Table 1.3 (cont.) Results of the Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Method : REAC SOP 1807

Page 2 of 10

Sample Number : MeOH Blank A 040606-1 19430 19432
Sample Location: MW38 9.5'-10.0' MW39 4.5'-5.0'
% Solid : 100 79 81

Analyte	Result µg/kg	RL µg/kg	Result µg/kg	RL µg/kg	Result µg/kg	RL µg/kg
Dichlorodifluoromethane	U	416	U	2110	U	1030
Chloromethane	U	250	U	1270	U	617
Vinyl Chloride	U	250	U	1270	947	617
Bromomethane	U	250	U	1270	U	617
Chloroethane	U	1630	U	8230	U	4010
Trichlorofluoromethane	U	4650	U	23800	U	11600
Acetone	U	1000	U	5060	U	2470
1,1-Dichloroethene	U	250	U	1270	U	617
Methylene Chloride	U	250	U	1270	195	617
Carbon Disulfide	U	250	U	1270	U	617
Methyl-t-butyl Ether	U	250	U	1270	U	617
trans-1,2-Dichloroethene	U	250	U	1270	U	617
1,1-Dichloroethane	U	250	U	1270	U	617
2-Butanone	U	250	U	1270	U	617
2,2-Dichloropropane	U	250	U	1270	U	617
cis-1,2-Dichloroethene	U	250	5080	1270	21400	617
Chloroform	U	250	U	1270	U	617
1,1-Dichloropropene	U	250	U	1270	U	617
1,2-Dichloroethane	U	250	U	1270	U	617
1,1,1-Trichloroethane	U	250	U	1270	U	617
Carbon Tetrachloride	U	250	U	1270	U	617
Benzene	U	250	U	1270	U	617
Trichloroethene	U	250	2790	1270	6430	617
1,2-Dichloropropane	U	250	U	1270	U	617
Bromodichloromethane	U	250	U	1270	U	617
Dibromomethane	U	250	U	1270	U	617
cis-1,3-Dichloropropene	U	250	U	1270	U	617
trans-1,3-Dichloropropene	U	250	U	1270	U	617
1,1,2-Trichloroethane	U	250	U	1270	U	617
1,3-Dichloropropane	U	250	U	1270	U	617
Dibromochloromethane	U	250	U	1270	U	617
1,2-Dibromoethane	U	250	U	1270	U	617
Bromoform	U	1350	U	6860	U	3340
4-Methyl-2-pentanone	U	250	U	1270	U	617
Toluene	U	250	U	1270	U	617
2-Hexanone	U	250	U	1270	U	617
Tetrachloroethene	U	250	1500	1270	986	617
Chlorobenzene	U	250	U	1270	U	617
1,1,1,2-Tetrachloroethane	U	250	U	1270	U	617
Ethylbenzene	U	250	U	1270	U	617
p&m-Xylene	U	500	U	2530	U	1230
o-Xylene	U	250	U	1270	U	617
Styrene	U	250	U	1270	U	617
Isopropylbenzene	U	250	U	1270	U	617
1,1,2,2-Tetrachloroethane	U	250	U	1270	U	617
1,2,3-Trichloropropane	U	250	U	1270	U	617
n-Propylbenzene	U	250	U	1270	U	617
Bromobenzene	U	250	U	1270	U	617
1,3,5-Trimethylbenzene	U	1640	U	8290	U	4040
2-Chlorotoluene	U	250	U	1270	U	617
4-Chlorotoluene	U	250	U	1270	U	617
tert-Butylbenzene	U	250	U	1270	U	617
1,2,4-Trimethylbenzene	U	250	U	1270	U	617
sec-Butylbenzene	U	250	U	1270	U	617
p-Isopropyltoluene	U	250	U	1270	U	617
1,3-Dichlorobenzene	U	250	U	1270	U	617
1,4-Dichlorobenzene	U	250	U	1270	U	617
n-Butylbenzene	U	250	U	1270	U	617
1,2-Dichlorobenzene	U	250	U	1270	U	617
1,2-Dibromo-3-chloropropan	U	626	U	3170	U	1550
1,2,4-Trichlorobenzene	U	250	U	1270	U	617
Hexachlorobutadiene	U	250	U	1270	U	617
Naphthalene	U	250	U	1270	U	617
1,2,3-Trichlorobenzene	U	250	U	1270	U	617

rv2086

Table 1.3 (cont.) Results of the Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Method : REAC SOP 1807

Page 3 of 10

Sample Number :	Soil Blank B 040606-1		19427		19436		19437		19428	
Sample Location:			Field Blank		Field Blank		Trip Blank		MW38 4.5'-5.0'	
% Solid :	100		100		100		100		75	
	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL
Analyte	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	5.00	U	5.00	U	5.00	U	66.7
Chloromethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Vinyl Chloride	U	5.00	U	5.00	U	5.00	U	5.00	584	66.7
Bromomethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Chloroethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Trichlorofluoromethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Acetone	U	20.0	5.32 J	20.0	5.61 J	20.0	U	20.0	137 J	267
1,1-Dichloroethene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Methylene Chloride	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Carbon Disulfide	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Methyl-t-butyl Ether	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
trans-1,2-Dichloroethene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,1-Dichloroethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
2-Butanone	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
2,2-Dichloropropane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
cis-1,2-Dichloroethene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Chloroform	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,1-Dichloropropene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,2-Dichloroethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,1,1-Trichloroethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Carbon Tetrachloride	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Benzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Trichloroethene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,2-Dichloropropane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Bromodichloromethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Dibromomethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
cis-1,3-Dichloropropene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
trans-1,3-Dichloropropene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,1,2-Trichloroethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,3-Dichloropropane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Dibromochloromethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,2-Dibromoethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Bromoform	U	8.00	U	8.00	U	8.00	U	8.00	U	107
4-Methyl-2-Pentanone	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Toluene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
2-Hexanone	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Tetrachloroethene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Chlorobenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,1,1,2-Tetrachloroethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Ethylbenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
p&m-Xylene	U	10.0	U	10.0	U	10.0	U	10.0	U	133
o-Xylene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Styrene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Isopropylbenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,1,2,2-Tetrachloroethane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,2,3-Trichloropropane	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
n-Propylbenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Bromobenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,3,5-Trimethylbenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
2-Chlorotoluene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
4-Chlorotoluene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
tert-Butylbenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,2,4-Trimethylbenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
sec-Butylbenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
p-Isopropyltoluene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,3-Dichlorobenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,4-Dichlorobenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
n-Butylbenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,2-Dichlorobenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,2-Dibromo-3-chloropropan	U	7.11	U	7.11	U	7.11	U	7.11	U	94.8
1,2,4-Trichlorobenzene	U	19.2	U	19.2	U	19.2	U	19.2	U	256
Hexachlorobutadiene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
Naphthalene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7
1,2,3-Trichlorobenzene	U	5.00	U	5.00	U	5.00	U	5.00	U	66.7

rv2087

Table 1.3 (cont.) Results of the Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Method : REAC SOP 1807

Page 4 of 10

Sample Number : Soil Blank B 040606-1 19431
Sample Location: MW38 13.5'-14.0'
% Solid : 100 74

Analyte	Result µg/kg	RL µg/kg	Result µg/kg	RL µg/kg
Dichlorodifluoromethane	U	5.00	U	67.6
Chloromethane	U	5.00	U	67.6
Vinyl Chloride	U	5.00	319 J	676
Bromomethane	U	5.00	U	67.6
Chloroethane	U	5.00	U	67.6
Trichlorofluoromethane	U	5.00	U	67.6
Acetone	U	20.0	65.6 J	270
1,1-Dichloroethene	U	5.00	19.9 J	67.6
Methylene Chloride	U	5.00	219 J	676
Carbon Disulfide	U	5.00	U	67.6
Methyl-t-butyl Ether	U	5.00	U	67.6
trans-1,2-Dichloroethene	U	5.00	60.1 J	67.6
1,1-Dichloroethane	U	5.00	U	67.6
2-Butanone	U	5.00	U	67.6
2,2-Dichloropropane	U	5.00	U	67.6
cis-1,2-Dichloroethene	U	5.00	9660	676
Chloroform	U	5.00	U	67.6
1,1-Dichloropropene	U	5.00	U	67.6
1,2-Dichloroethane	U	5.00	U	67.6
1,1,1-Trichloroethane	U	5.00	U	67.6
Carbon Tetrachloride	U	5.00	U	67.6
Benzene	U	5.00	U	67.6
Trichloroethene	U	5.00	6290	676
1,2-Dichloropropane	U	5.00	U J	67.6
Bromodichloromethane	U	5.00	U	67.6
Dibromomethane	U	5.00	U	67.6
cis-1,3-Dichloropropene	U	5.00	U	67.6
trans-1,3-Dichloropropene	U	5.00	U	67.6
1,1,2-Trichloroethane	U	5.00	U	67.6
1,3-Dichloropropane	U	5.00	U	67.6
Dibromochloromethane	U	5.00	U	67.6
1,2-Dibromoethane	U	5.00	U	67.6
Bromoform	U	8.00	U	108
4-Methyl-2-Pentanone	U	5.00	U	67.6
Toluene	U	5.00	U	67.6
2-Hexanone	U	5.00	U	67.6
Tetrachloroethene	U	5.00	5610	676
Chlorobenzene	U	5.00	U	67.6
1,1,1,2-Tetrachloroethane	U	5.00	U	67.6
Ethylbenzene	U	5.00	U	67.6
p&m-Xylene	U	10.0	U	135
o-Xylene	U	5.00	U	67.6
Styrene	U	5.00	U	67.6
Isopropylbenzene	U	5.00	U	67.6
1,1,2,2-Tetrachloroethane	U	5.00	U	67.6
1,2,3-Trichloropropane	U	5.00	U	67.6
n-Propylbenzene	U	5.00	U	67.6
Bromobenzene	U	5.00	U	67.6
1,3,5-Trimethylbenzene	U	5.00	U	67.6
2-Chlorotoluene	U	5.00	U	67.6
4-Chlorotoluene	U	5.00	U	67.6
tert-Butylbenzene	U	5.00	U	67.6
1,2,4-Trimethylbenzene	U	5.00	U	67.6
sec-Butylbenzene	U	5.00	U	67.6
p-Isopropyltoluene	U	5.00	U	67.6
1,3-Dichlorobenzene	U	5.00	U	67.6
1,4-Dichlorobenzene	U	5.00	U	67.6
n-Butylbenzene	U	5.00	U	67.6
1,2-Dichlorobenzene	U	5.00	U	67.6
1,2-Dibromo-3-chloropropan	U	7.4	U	96.1
1,2,4-Trichlorobenzene	U	19.2	U	259
Hexachlorobutadiene	U	5.00	U	67.6
Naphthalene	U	5.00	U	67.6
1,2,3-Trichlorobenzene	U	5.00	U	67.6

rv2088

Table 1.3 (cont.) Results of the Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Method : REAC SOP 1807

Page 5 of 10

Sample Number :	Soil Blank B 040706-1		19439		19440		19438	
Sample Location:			Field Blank		Trip Blank		MW40 14.5'-15.0'	
% Solid :	100		100		100		76	
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	5.00	U	5.00	U	65.8
Chloromethane	U	5.00	U	5.00	U	5.00	U	65.8
Vinyl Chloride	U	5.00	U	5.00	U	5.00	166	65.8
Bromomethane	U	5.00	U	5.00	U	5.00	U	65.8
Chloroethane	U	5.00	U	5.00	U	5.00	U	65.8
Trichlorofluoromethane	U	5.00	U	5.00	U	5.00	U	65.8
Acetone	5.01	J 20.0	U	20.0	U	20.0	59.4	J 263
1,1-Dichloroethene	U	5.00	U	5.00	U	5.00	U	65.8
Methylene Chloride	U	5.00	U	5.00	U	5.00	U	65.8
Carbon Disulfide	U	5.00	U	5.00	U	5.00	U	65.8
Methyl-t-butyl Ether	U	5.00	U	5.00	U	5.00	U	65.8
trans-1,2-Dichloroethene	U	5.00	U	5.00	U	5.00	U	65.8
1,1-Dichloroethane	U	5.00	U	5.00	U	5.00	U	65.8
2-Butanone	U	5.00	U	5.00	U	5.00	U	65.8
2,2-Dichloropropane	U	5.00	U	5.00	U	5.00	U	65.8
cis-1,2-Dichloroethene	U	5.00	U	5.00	U	5.00	125	65.8
Chloroform	U	5.00	U	5.00	U	5.00	U	65.8
1,1-Dichloropropene	U	5.00	U	5.00	U	5.00	U	65.8
1,2-Dichloroethane	U	5.00	U	5.00	U	5.00	U	65.8
1,1,1-Trichloroethane	U	5.00	U	5.00	U	5.00	U	65.8
Carbon Tetrachloride	U	5.00	U	5.00	U	5.00	U	65.8
Benzene	U	5.00	U	5.00	U	5.00	U	65.8
Trichloroethene	U	5.00	U	5.00	U	5.00	96.8	65.8
1,2-Dichloropropane	U	5.00	U	5.00	U	5.00	U	65.8
Bromodichloromethane	U	5.00	U	5.00	U	5.00	U	65.8
Dibromomethane	U	5.00	U	5.00	U	5.00	U	65.8
cis-1,3-Dichloropropene	U	5.00	U	5.00	U	5.00	U	65.8
trans-1,3-Dichloropropene	U	5.00	U	5.00	U	5.00	U	65.8
1,1,2-Trichloroethane	U	5.00	U	5.00	U	5.00	U	65.8
1,3-Dichloropropane	U	5.00	U	5.00	U	5.00	U	65.8
Dibromochloromethane	U	5.00	U	5.00	U	5.00	U	65.8
1,2-Dibromoethane	U	5.00	U	5.00	U	5.00	U	65.8
Bromoform	U	8.00	U	8.00	U	8.00	U	105
4-Methyl-2-Pentanone	U	5.00	U	5.00	U	5.00	U	65.8
Toluene	U	5.00	U	5.00	U	5.00	U	65.8
2-Hexanone	U	5.00	U	5.00	U	5.00	U	65.8
Tetrachloroethene	U	5.00	U	5.00	U	5.00	422	65.8
Chlorobenzene	U	5.00	U	5.00	U	5.00	U	65.8
1,1,1,2-Tetrachloroethane	U	5.00	U	5.00	U	5.00	U	65.8
Ethylbenzene	U	5.00	U	5.00	U	5.00	U	65.8
p&m-Xylene	U	10.0	U	10.0	U	10.0	U	132
o-Xylene	U	5.00	U	5.00	U	5.00	U	65.8
Styrene	U	5.00	U	5.00	U	5.00	U	65.8
Isopropylbenzene	U	5.00	U	5.00	U	5.00	U	65.8
1,1,2,2-Tetrachloroethane	U	5.00	U	5.00	U	5.00	U	65.8
1,2,3-Trichloropropane	U	5.00	U	5.00	U	5.00	U	65.8
n-Propylbenzene	U	5.00	U	5.00	U	5.00	U	65.8
Bromobenzene	U	5.00	U	5.00	U	5.00	U	65.8
1,3,5-Trimethylbenzene	U	5.00	U	5.00	U	5.00	U	65.8
2-Chlorotoluene	U	5.00	U	5.00	U	5.00	U	65.8
4-Chlorotoluene	U	5.00	U	5.00	U	5.00	U	65.8
tert-Butylbenzene	U	5.00	U	5.00	U	5.00	U	65.8
1,2,4-Trimethylbenzene	U	5.00	U	5.00	U	5.00	U	65.8
sec-Butylbenzene	U	5.00	U	5.00	U	5.00	U	65.8
p-Isopropyltoluene	U	5.00	U	5.00	U	5.00	U	65.8
1,3-Dichlorobenzene	U	5.00	U	5.00	U	5.00	U	65.8
1,4-Dichlorobenzene	U	5.00	U	5.00	U	5.00	U	65.8
n-Butylbenzene	U	5.00	U	5.00	U	5.00	U	65.8
1,2-Dichlorobenzene	U	5.00	U	5.00	U	5.00	U	65.8
1,2-Dibromo-3-chloropropan	U	7.11	U	7.11	U	7.11	U	93.5
1,2,4-Trichlorobenzene	U	19.2	U	19.2	U	19.2	U	253
Hexachlorobutadiene	U	5.00	U	5.00	U	5.00	U	65.8
Naphthalene	U	5.00	U	5.00	U	5.00	U	65.8
1,2,3-Trichlorobenzene	U	5.00	U	5.00	U	5.00	U	65.8

rv2089

Table 1.3 (cont.) Results of the Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Method : REAC SOP 1807

Page 6 of 10

Sample Number MeOH Blank A 040706-2 19435
Sample Location: MW39 14.5'-15.0'
% solids 100 75

Analyte	Result µg/kg	RL µg/kg	Result µg/kg	RL µg/kg
Dichlorodifluoromethane	U	416	U	22200
Chloromethane	U	250	U	13300
Vinyl Chloride	U	250	6960 J	13300
Bromomethane	U J	250	U J	13300
Chloroethane	U	1630	U	86700
Trichlorofluoromethane	U J	4650	U J	251000
Acetone	U	1000	U	53300
1,1-Dichloroethene	U	250	U	13300
Methylene Chloride	U	250	U	13300
Carbon Disulfide	U	250	U	13300
Methyl-t-butyl Ether	U	250	U	13300
trans-1,2-Dichloroethene	U	250	U	13300
1,1-Dichloroethane	U	250	U	13300
2-Butanone	U	250	U	13300
2,2-Dichloropropane	U	250	U	13300
cis-1,2-Dichloroethene	U	250	62700	13300
Chloroform	U	250	U	13300
1,1-Dichloropropene	U	250	U	13300
1,2-Dichloroethane	U	250	U	13300
1,1,1-Trichloroethane	U	250	U	13300
Carbon Tetrachloride	U	250	U	13300
Benzene	U	250	U	13300
Trichloroethene	U	250	6250 J	13300
1,2-Dichloropropane	U	250	U	13300
Bromodichloromethane	U	250	U	13300
Dibromomethane	U	250	U	13300
cis-1,3-Dichloropropene	U	250	U	13300
trans-1,3-Dichloropropene	U	250	U	13300
1,1,2-Trichloroethane	U	250	U	13300
1,3-Dichloropropane	U	250	U	13300
Dibromochloromethane	U	250	U	13300
1,2-Dibromoethane	U	250	U	13300
Bromoform	U	1350	U	72200
4-Methyl-2-pentanone	U	250	U	13300
Toluene	U	250	U	13300
2-Hexanone	U	250	U	13300
Tetrachloroethene	U	250	185000	13300
Chlorobenzene	U	250	U	13300
1,1,1,2-Tetrachloroethane	U	250	U	13300
Ethylbenzene	U	250	U	13300
p&m-Xylene	U	500	U	26700
o-Xylene	U	250	U	13300
Styrene	U	250	U	13300
Isopropylbenzene	U	250	U	13300
1,1,2,2-Tetrachloroethane	U	250	U	13300
1,2,3-Trichloropropane	U	250	U	13300
n-Propylbenzene	U	250	U	13300
Bromobenzene	U	250	U	13300
1,3,5-Trimethylbenzene	U	1640	U	87400
2-Chlorotoluene	U	250	U	13300
4-Chlorotoluene	U	250	U	13300
tert-Butylbenzene	U	250	U	13300
1,2,4-Trimethylbenzene	U	250	U	13300
sec-Butylbenzene	U	250	U	13300
p-Isopropyltoluene	U	250	U	13300
1,3-Dichlorobenzene	U	250	U	13300
1,4-Dichlorobenzene	U	250	U	13300
n-Butylbenzene	U	250	U	13300
1,2-Dichlorobenzene	U	250	U	13300
1,2-Dibromo-3-chloropropan	U	626	U	33400
1,2,4-Trichlorobenzene	U	250	U	13300
Hexachlorobutadiene	U	250	U	13300
Naphthalene	U	250	U	13300
1,2,3-Trichlorobenzene	U	250	U	13300

rv2090

Table 1.3 (cont.) Results of the Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Method : REAC SOP 1807

Page 7 of 10

Sample Number:	Soil Blank B 041106-1		19461		19448		19449		19468	
Sample Location:			SB44 11'to12'		Field Blank		Trip Blank		Field Blank	
% solids	100		74		100		100		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	67.6	U	5.00	U	5.00	U	5.00
Chloromethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Vinyl Chloride	U	5.00	761	67.6	U	5.00	57.4	5.00	U	5.00
Bromomethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Chloroethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Trichlorofluoromethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Acetone	U	20.0	36.9	270	U	20.0	U	20.0	U	20.0
1,1-Dichloroethene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Methylene Chloride	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Carbon Disulfide	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Methyl-t-butyl Ether	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
trans-1,2-Dichloroethene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,1-Dichloroethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
2-Butanone	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
2,2-Dichloropropane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
cis-1,2-Dichloroethene	U	5.00	637	67.6	U	5.00	2.52	5.00	U	5.00
Chloroform	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,1-Dichloropropene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,2-Dichloroethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,1,1-Trichloroethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Carbon Tetrachloride	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Benzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Trichloroethene	U	5.00	445	67.6	U	5.00	U	5.00	U	5.00
1,2-Dichloropropane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Bromodichloromethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Dibromomethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
cis-1,3-Dichloropropene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
trans-1,3-Dichloropropene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,1,2-Trichloroethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,3-Dichloropropane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Dibromochloromethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,2-Dibromoethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Bromoform	U	8.00	U	108	U	8.00	U	8.00	U	8.00
4-Methyl-2-Pentanone	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Toluene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
2-Hexanone	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Tetrachloroethene	U	5.00	1100	67.6	U	5.00	1.74	5.00	U	5.00
Chlorobenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,1,1,2-Tetrachloroethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Ethylbenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
p&m-Xylene	U	10.0	U	135	U	10.0	U	10.0	U	10.0
o-Xylene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Styrene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Isopropylbenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,1,2,2-Tetrachloroethane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,2,3-Trichloropropane	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
n-Propylbenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Bromobenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,3,5-Trimethylbenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
2-Chlorotoluene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
4-Chlorotoluene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
tert-Butylbenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,2,4-Trimethylbenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
sec-Butylbenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
p-Isopropyltoluene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,3-Dichlorobenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,4-Dichlorobenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
n-Butylbenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,2-Dichlorobenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,2-Dibromo-3-chloropropan	U	7.11	U	96.1	U	7.11	U	7.11	U	7.11
1,2,4-Trichlorobenzene	U	19.2	U	259	U	19.2	U	19.2	U	19.2
Hexachlorobutadiene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
Naphthalene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00
1,2,3-Trichlorobenzene	U	5.00	U	67.6	U	5.00	U	5.00	U	5.00

rv2091

Table 1.3 (cont.) Results of the Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Method : REAC SOP 1807

Page 8 of 10

Sample Number:	Soil Blank B 041108-1		19446		19445	
Sample Location:			MW43 9.5'to10'		MW42 14.5'to15'	
% solids	100		81		74	
Analyte	Result µg/kg	RL µg/kg	Result µg/kg	RL µg/kg	Result µg/kg	RL µg/kg
Dichlorodifluoromethane	U	5.00	U	30.9	U	33.8
Chloromethane	U	5.00	U	30.9	U	33.8
Vinyl Chloride	U	5.00	113	30.9	445	33.8
Bromomethane	U	5.00	U	30.9	U	33.8
Chloroethane	U	5.00	U	30.9	U	33.8
Trichlorofluoromethane	U	5.00	U	30.9	U	33.8
Acetone	U	20.0	U	123	U	135
1,1-Dichloroethene	U	5.00	U	30.9	U	33.8
Methylene Chloride	U	5.00	U	30.9	U	33.8
Carbon Disulfide	U	5.00	U	30.9	U	33.8
Methyl-t-butyl Ether	U	5.00	U	30.9	U	33.8
trans-1,2-Dichloroethene	U	5.00	U	30.9	U	33.8
1,1-Dichloroethane	U	5.00	U	30.9	U	33.8
2-Butanone	U	5.00	U	30.9	U	33.8
2,2-Dichloropropane	U	5.00	U	30.9	U	33.8
cis-1,2-Dichloroethene	U	5.00	222	30.9	3680	33.8
Chloroform	U	5.00	U	30.9	U	33.8
1,1-Dichloropropene	U	5.00	U	30.9	U	33.8
1,2-Dichloroethane	U	5.00	U	30.9	U	33.8
1,1,1-Trichloroethane	U	5.00	U	30.9	U	33.8
Carbon Tetrachloride	U	5.00	U	30.9	U	33.8
Benzene	U	5.00	U	30.9	U	33.8
Trichloroethene	U	5.00	43.2	30.9	1450	33.8
1,2-Dichloropropane	U	5.00	U	30.9	U	33.8
Bromodichloromethane	U	5.00	U	30.9	U	33.8
Dibromomethane	U	5.00	U	30.9	U	33.8
cis-1,3-Dichloropropene	U	5.00	U	30.9	U	33.8
trans-1,3-Dichloropropene	U	5.00	U	30.9	U	33.8
1,1,2-Trichloroethane	U	5.00	U	30.9	U	33.8
1,3-Dichloropropane	U	5.00	U	30.9	U	33.8
Dibromochloromethane	U	5.00	U	30.9	U	33.8
1,2-Dibromoethane	U	5.00	U	30.9	U	33.8
Bromoform	U	8.00	U	49.3	U	54.0
4-Methyl-2-Pentanone	U	5.00	U	30.9	U	33.8
Toluene	U	5.00	U	30.9	U	33.8
2-Hexanone	U	5.00	U	30.9	U	33.8
Tetrachloroethene	U	5.00	25.6	30.9	2090	33.8
Chlorobenzene	U	5.00	U	30.9	U	33.8
1,1,1,2-Tetrachloroethane	U	5.00	U	30.9	U	33.8
Ethylbenzene	U	5.00	U	30.9	U	33.8
p&m-Xylene	U	10.0	U	61.7	U	67.6
o-Xylene	U	5.00	U	30.9	U	33.8
Styrene	U	5.00	U	30.9	U	33.8
Isopropylbenzene	U	5.00	U	30.9	U	33.8
1,1,2,2-Tetrachloroethane	U	5.00	U	30.9	U	33.8
1,2,3-Trichloropropane	U	5.00	U	30.9	U	33.8
n-Propylbenzene	U	5.00	U	30.9	U	33.8
Bromobenzene	U	5.00	U	30.9	U	33.8
1,3,5-Trimethylbenzene	U	5.00	U	30.9	U	33.8
2-Chlorotoluene	U	5.00	U	30.9	U	33.8
4-Chlorotoluene	U	5.00	U	30.9	U	33.8
tert-Butylbenzene	U	5.00	U	30.9	U	33.8
1,2,4-Trimethylbenzene	U	5.00	U	30.9	U	33.8
sec-Butylbenzene	U	5.00	U	30.9	U	33.8
p-Isopropyltoluene	U	5.00	U	30.9	U	33.8
1,3-Dichlorobenzene	U	5.00	U	30.9	U	33.8
1,4-Dichlorobenzene	U	5.00	U	30.9	U	33.8
n-Butylbenzene	U	5.00	U	30.9	U	33.8
1,2-Dichlorobenzene	U	5.00	U	30.9	U	33.8
1,2-Dibromo-3-chloropropan	U	7.11	U	43.9	U	48.0
1,2,4-Trichlorobenzene	U	19.2	U	119	U	130
Hexachlorobutadiene	U	5.00	U	30.9	U	33.8
Naphthalene	U	5.00	U	30.9	U	33.8
1,2,3-Trichlorobenzene	U	5.00	U	30.9	U	33.8

rv2092

Table 1.3 (cont.) Results of the Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Method : REAC SOP 1807

Page 9 of 10

Sample Number:	Methanol Blank 041206-01		19441		19442		19443		19444		
Sample Location:			MW41 6.5' to 7'		MW41 8.5' to 9'		MW41 11.5' to 12'		MW41 12.5' to 13'		
% solids	100		80		77		71		75		
	Result	RL	Result	RL	Result	RL	Result	RL	Result	RL	
Analyte	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	
Dichlorodifluoromethane	U	250	U	625	U	26000	U	704	U	333	
Chloromethane	U	250	U	625	U	26000	U	704	U	333	
Vinyl Chloride	U	250	U	625	U	26000	U	704	U	333	
Bromomethane	U	250	U	625	U	26000	U	704	U	333	
Chloroethane	U	250	U	625	U	26000	U	704	U	333	
Trichlorofluoromethane	U	250	U	625	U	26000	U	704	U	333	
Acetone	U	1000	U	2500	U	104000	U	2820	U	1330	
1,1-Dichloroethene	U	250	U	625	U	26000	U	704	U	333	
Methylene Chloride	65.5	J	250	U	625	U	26000	U	704	U	333
Carbon Disulfide	U	250	U	625	U	26000	U	704	U	333	
Methyl-t-butyl Ether	U	250	U	625	U	26000	U	704	U	333	
trans-1,2-Dichloroethene	U	250	U	625	U	26000	U	704	U	333	
1,1-Dichloroethane	U	250	U	625	U	26000	U	704	U	333	
2-Butanone	U	250	U	625	U	26000	U	704	U	333	
2,2-Dichloropropane	U	250	U	625	U	26000	U	704	U	333	
cis-1,2-Dichloroethene	U	250	3850	625	U	26000	6320	704	19100	667	
Chloroform	U	250	U	625	U	26000	U	704	U	333	
1,1-Dichloropropene	U	250	U	625	U	26000	U	704	U	333	
1,2-Dichloroethane	U	250	U	625	U	26000	U	704	U	333	
1,1,1-Trichloroethane	U	250	U	625	U	26000	U	704	U	333	
Carbon Tetrachloride	U	250	U	625	U	26000	U	704	U	333	
Benzene	U	250	U	625	U	26000	U	704	U	333	
Trichloroethene	U	250	543	J	625	U	26000	1500	704	3140	333
1,2-Dichloropropane	U	250	U	625	U	26000	U	704	U	333	
Bromodichloromethane	U	250	U	625	U	26000	U	704	U	333	
Dibromomethane	U	250	U	625	U	26000	U	704	U	333	
cis-1,3-Dichloropropene	U	250	U	625	U	26000	U	704	U	333	
trans-1,3-Dichloropropene	U	250	U	625	U	26000	U	704	U	333	
1,1,2-Trichloroethane	U	250	U	625	U	26000	U	704	U	333	
1,3-Dichloropropane	U	250	U	625	U	26000	U	704	U	333	
Dibromochloromethane	U	250	U	625	U	26000	U	704	U	333	
1,2-Dibromoethane	U	250	U	625	U	26000	U	704	U	333	
Bromoform	U	1130	U	2820	U	117000	U	3180	U	1500	
4-Methyl-2-pentanone	U	441	U	1100	U	45800	U	1240	U	588	
Toluene	U	250	U	625	U	26000	U	704	U	333	
2-Hexanone	U	587	U	1470	U	60900	U	1650	U	782	
Tetrachloroethene	U	250	4330	625	175000	26000	2200	704	957	333	
Chlorobenzene	U	250	U	625	U	26000	U	704	U	333	
1,1,1,2-Tetrachloroethane	U	250	U	625	U	26000	U	704	U	333	
Ethylbenzene	U	250	U	625	U	26000	U	704	U	333	
p&m-Xylene	U	500	U	1250	U	51900	U	1410	U	667	
o-Xylene	U	250	U	625	U	26000	U	704	U	333	
Styrene	U	250	U	625	U	26000	U	704	U	333	
Isopropylbenzene	U	250	U	625	U	26000	U	704	U	333	
1,1,2,2-Tetrachloroethane	U	250	U	625	U	26000	U	704	U	333	
1,2,3-Trichloropropane	U	250	U	625	U	26000	U	704	U	333	
n-Propylbenzene	U	250	U	625	U	26000	U	704	U	333	
Bromobenzene	U	250	U	625	U	26000	U	704	U	333	
1,3,5-Trimethylbenzene	U	250	U	625	U	26000	U	704	U	333	
2-Chlorotoluene	U	250	U	625	U	26000	U	704	U	333	
4-Chlorotoluene	U	250	U	625	U	26000	U	704	U	333	
tert-Butylbenzene	U	250	U	625	U	26000	U	704	U	333	
1,2,4-Trimethylbenzene	U	250	U	625	U	26000	U	704	U	333	
sec-Butylbenzene	U	250	U	625	U	26000	U	704	U	333	
p-Isopropyltoluene	U	250	U	625	U	26000	U	704	U	333	
1,3-Dichlorobenzene	U	250	U	625	U	26000	U	704	U	333	
1,4-Dichlorobenzene	U	250	U	625	U	26000	U	704	U	333	
n-Butylbenzene	U	250	U	625	U	26000	U	704	U	333	
1,2-Dichlorobenzene	U	250	U	625	U	26000	U	704	U	333	
1,2-Dibromo-3-chloropropan	U	911	U	2480	U	103000	U	2790	U	1320	
1,2,4-Trichlorobenzene	U	791	U	1980	U	82000	U	2230	U	1050	
Hexachlorobutadiene	U	250	U	625	U	26000	U	704	U	333	
Naphthalene	U	991	U	2480	U	103000	U	2790	U	1320	
1,2,3-Trichlorobenzene	U	250	U	625	U	26000	U	704	U	333	

rv2093

Table 1.3 (cont.) Results of the Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Method : REAC SOP 1807

Page 10 of 10

Sample Number: Soil Blank B 041206-2 19447
Sample Location: MW43 11.5'to12'
% solids 100 78

Analyte	Result µg/kg	RL µg/kg	Result µg/kg	RL µg/kg
Dichlorodifluoromethane	U	5.00	U	6.41
Chloromethane	U	5.00	U	6.41
Vinyl Chloride	U	5.00	149	6.41
Bromomethane	U	5.00	U	6.41
Chloroethane	U	5.00	U	6.41
Trichlorofluoromethane	U	5.00	U	6.41
Acetone	U	20.0	8.6 J	25.6
1,1-Dichloroethene	U	5.00	U	6.41
Methylene Chloride	U	5.00	U	6.41
Carbon Disulfide	U	5.00	U	6.41
Methyl-t-butyl Ether	U	5.00	U	6.41
trans-1,2-Dichloroethene	U	5.00	U	6.41
1,1-Dichloroethane	U	5.00	U	6.41
2-Butanone	U	5.00	U	6.41
2,2-Dichloropropane	U	5.00	U	6.41
cis-1,2-Dichloroethene	U	5.00	195	6.41
Chloroform	U	5.00	U	6.41
1,1-Dichloropropene	U	5.00	U	6.41
1,2-Dichloroethane	U	5.00	U	6.41
1,1,1-Trichloroethane	U	5.00	U	6.41
Carbon Tetrachloride	U	5.00	U	6.41
Benzene	U	5.00	U	6.41
Trichloroethene	U	5.00	75.0	6.41
1,2-Dichloropropane	U	5.00	U	6.41
Bromodichloromethane	U	5.00	U	6.41
Dibromomethane	U	5.00	U	6.41
cis-1,3-Dichloropropene	U	135	U	174
trans-1,3-Dichloropropene	U	5.00	U	6.41
1,1,2-Trichloroethane	U	5.00	U	6.41
1,3-Dichloropropane	U	5.00	U	6.41
Dibromochloromethane	U	5.00	U	6.41
1,2-Dibromoethane	U	5.00	U	6.41
Bromoform	U	176	U	225
4-Methyl-2-Pentanone	U	153	U	197
Toluene	U	5.00	U	6.41
2-Hexanone	U	5.00	U	6.41
Tetrachloroethene	U	5.00	96.1	6.41
Chlorobenzene	U	5.00	U	6.41
1,1,1,2-Tetrachloroethane	U	5.00	U	6.41
Ethylbenzene	U	5.00	U	6.41
p&m-Xylene	U	10.0	U	12.8
o-Xylene	U	5.00	U	6.41
Styrene	U	5.00	U	6.41
Isopropylbenzene	U	5.00	U	6.41
1,1,2,2-Tetrachloroethane	U	5.00	U	6.41
1,2,3-Trichloropropane	U	5.00	U	6.41
n-Propylbenzene	U	5.00	U	6.41
Bromobenzene	U	5.00	U	6.41
1,3,5-Trimethylbenzene	U	5.00	U	6.41
2-Chlorotoluene	U	5.00	U	6.41
4-Chlorotoluene	U	5.00	U	6.41
tert-Butylbenzene	U	5.00	U	6.41
1,2,4-Trimethylbenzene	U	5.00	U	6.41
sec-Butylbenzene	U	5.00	U	6.41
p-Isopropyltoluene	U	5.00	U	6.41
1,3-Dichlorobenzene	U	5.00	U	6.41
1,4-Dichlorobenzene	U	5.00	U	6.41
n-Butylbenzene	U	5.00	U	6.41
1,2-Dichlorobenzene	U	5.00	U	6.41
1,2-Dibromo-3-chloropropan	U	189	U	243
1,2,4-Trichlorobenzene	U	140	U	179
Hexachlorobutadiene	U	5.00	U	6.41
Naphthalene	U	123	U	158
1,2,3-Trichlorobenzene	U	5.00	U	6.41

rv2094

Table 1.4 Results of TIC for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Sample #	Compound
19433/5000x	No TICs Found
19434/10000x	No TICs Found
19429/200x	No TICs Found
19430/200x	No TICs Found
19432/100x	No TICs Found
Soil Blank B 040606-1	No TICs Found
19427	No TICs Found
19436	No TICs Found
19437	No TICs Found
19428/10x	No TICs Found
19431/10x	No TICs Found
Soil Blank B 040706-1	No TICs Found
19439	No TICs Found
19440	No TICs Found
19438/10x	No TICs Found
MeOH Blank A 040706-2	No TICs Found
19435/2000x	No TICs Found
Soil Blank B 041106-1	No TICs Found
19461/10x	No TICs Found
19448	No TICs Found
19449	No TICs Found
19468	No TICs Found
19446/5x	No TICs Found
19445/5x	No TICs Found
Methanol Blank 041206-1	No TICs Found
19441/100x	No TICs Found
19442/4000x	No TICs Found
19443/100x	No TICs Found
19444/50x	No TICs Found
Soil Blank B 041206-2	No TICs Found
19447	No TICs Found

Table 1.4 (cont.) Results of TIC for VOC in Soil
 WA # 0-111 Sabana Abajo Industrial Park PCE Site
 Based on Dry Weight

Sample	Compound	Concentration*
Methanol Blank A 040606-1	Unknown	320
19426	Unknown	940

* Estimated Concentration (Response Factor = 1.0)

Table 2.1 Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Page 1 of 4

Analysis Date 060411
Matrix Water

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV3455.D	Water Blank A 041106-2	126772	943925	531218	107	103	91
AV3456.D	LCS AW 60	127630	949195	540226	106	102	90
AV3457.D	19458	125357	926138	518714	106	104	91
AV3461.D	19460/500x	143014	1043280	561394	102	105	98
AV3462.D	19460/2000x	156924	1097487	602723	102	104	97
AV3463.D	19456/20x	156390	1099632	607268	100	104	96
AV3464.D	19456/20x ms	152951	1081466	602362	99	103	94
AV3465.D	19456/20x msd	151503	1058973	590709	99	102	94
AV3466.D	19459	147750	1036270	573963	102	104	95
AV3467.D	19467	130003	1059224	586608	110	103	92

Cal Check Area AV3453.D 135565 923417 547762

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

Ins1187

Table 2.1 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Page 2 of 4

Analysis Date 060412
Matrix Water

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV3475.D	Water Blank A 041206-2	152636	1139490	634827	107	103	95
AV3476.D	19450/2x	151047	1135792	628542	107	103	95
AV3477.D	19451/2x	146621	1131874	625993	107	103	94
AV3478.D	19452	148593	1141848	632035	107	103	94
AV3479.D	19463	144349	1141516	631030	109	103	93
AV3480.D	19464	145705	1137614	631667	107	103	92
AV3484.D	19453/200x	150204	1136570	626905	106	103	93
AV3485.D	19454/500x	143139	1120604	623063	110	103	93
AV3486.D	19455/500x	143608	1116745	621288	108	104	92
AV3487.D	19457/200x	144797	1114052	618838	106	103	92
AV3488.D	19465/400x	143287	1088996	608975	108	103	92

Cal Check Area AV3473.D 167874 1165410 663414

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

isv1189

Table 2.1 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Page 3 of 4

Analysis Date 060413
Matrix Water

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV3495.D	Water Blank A 041306-1	146837	1035366	578985	104	103	93
AV3496.D	LCS AW 61	136958	1022901	577484	105	102	91
AV3497.D	19476	135132	1021325	564568	106	104	93
AV3498.D	19477	132218	1007471	564767	108	103	91
AV3499.D	19466/2000x	140118	999367	553515	103	103	92
AV3500.D	19474/10x	132710	987256	549449	107	104	93
AV3501.D	19462	136288	973674	545218	104	103	92
AV3502.D	19462 ms	133459	973916	548431	103	101	91
AV3503.D	19462 msd	133095	973834	554237	104	101	90
AV3504.D	19470/2000x	127856	972654	541370	109	104	91
AV3505.D	19471/2000x	124409	991724	553456	110	104	90
AV3506.D	19472/200x	128447	989804	552670	106	104	90
AV3507.D	19473/2000x	131338	993836	555927	105	103	90
AV3508.D	19473/2000x ms	130004	1017248	570529	108	103	89
AV3509.D	19473/2000x msd	133430	1003614	564428	106	102	88

Cal Check Area AV3494.D 150019 1045900 601504

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

isv1192

Table 2.1 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Page 4 of 4

Analysis Date 060414
Matrix Water

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV3515.D	Water Blank A 041406-1	152886	1047215	589703	105	103	94
AV3516.D	19475/200x	147065	988829	558252	104	103	93

Cal Check Area AV3514.D 144408 1058340 608191

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

isv1194

Table 2.2 Results of LCS Analysis for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Sample ID: LCS AW 60

Analyte	LCS Spike Added (µg/L)	LCS Conc. (µg/L)	LCS % Rec.	QC Limits
				% Rec.
1,1-Dichloroethene	50.0	45.2	90	70 - 130
Benzene	50.0	44.9	90	70 - 130
Trichloroethene	50.0	42.8	86	70 - 130
Toluene	50.0	44.5	89	70 - 130
Chlorobenzene	50.0	42.8	86	70 - 130

LCS60

Table 2.2 (cont.) Results of LCS Analysis for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Sample ID: LCS AW 61

Analyte	LCS Spike Added (µg/L)	LCS Conc. (µg/L)	LCS % Rec.	QC Limits
				% Rec.
1,1-Dichloroethene	50.0	46.7	93	70 - 130
Benzene	50.0	43.9	88	70 - 130
Trichloroethene	50.0	42.8	86	70 - 130
Toluene	50.0	44.0	88	70 - 130
Chlorobenzene	50.0	42.5	85	70 - 130

LCS 61

Table 2.3 Results of MS/MSD Analysis for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Sample No. : 19456/20x

Analyte	Sample Conc. (µg/L)	MS Spike Added (µg/L)	MSD Spike Added (µg/L)	MS Conc. (µg/L)	MSD Conc. (µg/L)	MS % Rec.	MSD % Rec.	RPD	QC Limits	
									RPD	% Rec.
1,1-Dichloroethene	U	1000	1000	590	711	59 *	71	19 *	14	61 - 145
Benzene	U	1000	1000	823	878	82	88	7	11	76 - 127
Trichloroethene	1110	1000	1000	1930	2040	82	93	12	14	71 - 120
Toluene	U	1000	1000	817	875	82	88	7	11	76 - 125
Chlorobenzene	U	1000	1000	841	878	84	88	4	11	75 - 130

msv749

Table 2.3 (cont.) Results of MS/MSD Analysis for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Sample No. : 19473/2000x

Analyte	Sample Conc. (µg/L)	MS Spike Added (µg/L)	MSD Spike Added (µg/L)	MS Conc. (µg/L)	MSD Conc. (µg/L)	MS % Rec.	MSD % Rec.	RPD	QC Limits	
									RPD	% Rec.
1,1-Dichloroethene	U	100000	100000	71400	89400	71	89	22 *	14	61 - 145
Benzene	U	100000	100000	78900	88200	79	88	11	11	76 - 127
Trichloroethene	42900	100000	100000	114000	131000	71	88	22 *	14	71 - 120
Toluene	U	100000	100000	77600	86600	78	87	11	11	76 - 125
Chlorobenzene	U	100000	100000	79200	83800	79	84	6	11	75 - 130

msv50

Table 2.3 (cont.) Results of MS/MSD Analysis for VOC in Water
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Sample No. : 19462

Analyte	Sample Conc. (µg/L)	MS Spike Added (µg/L)	MSD Spike Added (µg/L)	MS Conc. (µg/L)	MSD Conc. (µg/L)	MS % Rec.	MSD % Rec.	RPD	QC Limits	
									RPD	% Rec.
1,1-Dichloroethene	U	50.0	50.0	46.8	47.7	94	95	1	14	61 - 145
Benzene	U	50.0	50.0	45.0	45.9	90	92	1	11	76 - 127
Trichloroethene	19.6	50.0	50.0	62.4	60.6	85	82	2	14	71 - 120
Toluene	U	50.0	50.0	45.5	45.5	91	91	0	11	76 - 125
Chlorobenzene	10.2	50.0	50.0	53.4	52.8	86	85	1	11	75 - 130

msv751

Table 2.4 Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Page 1 of 7

Analysis Date 04/06/06
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV4347.D	Soil Blank B 040606-1	163977	1292985	706367	113	101	95
BV4348.D	LCS BS 71	157168	1301470	708748	113	100	94
BV4349.D	19427	152973	1202285	662454	116	101	97
BV4350.D	19436	152378	1181283	644150	116	101	94
BV4351.D	19437	149855	1180299	645968	115	102	95
BV4352.D	19428/10x	149300	1158519	634883	114	102	96
BV4353.D	19431/10x	163673	1194999	672474	105	100	92
BV4354.D	19428/10x ms	132612	1181339	612508	110	104	91
BV4355.D	19428/10x msd	136792	1174138	617137	111	103	93

Cal Check Area BV4346.D 180707 1392720 811189

Surrogate 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

isv1182

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Page 2 of 7

Analysis Date 04/06/06
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV3427.D	MeOH Blank A 040606-1	141248	987842	550392	102	102	97
AV3428.D	LCS AM 60	142094	974781	551246	102	102	94
AV3429.D	19433/5000x	141123	957041	533621	101	103	94
AV3430.D	19434/10000x	138344	930330	522350	101	103	94
AV3431.D	19434/10000x ms	135560	925856	527304	102	102	92
AV3432.D	19434/10000x msd	120256	970014	549449	113	102	90
AV3433.D	19426/100x	146238	1123101	622886	105	103	90
AV3434.D	19429/200x	139588	1024562	579530	104	104	92
AV3435.D	19430/200x	139233	1036063	577566	104	104	91
AV3436.D	19432/100x	138095	1025284	599975	105	101	91

Cal Check Area AV3424.D 134330 954132 550700

Surrogate Limits			
IS 1	Bromochloromethane	Surr. 1	1,2-Dichloroethane-d4
IS 2	1,4-Difluorobenzene	Surr. 2	Toluene-d8
IS 3	Chlorobenzene-d5	Surr. 3	p-Bromofluorobenzene

Soil
70-121
84-138
59-113

isv1183

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Page 3 of 7

Analysis Date 0604/07/060407
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV4360.D	Soil Blank B 040607-1	154691	1228885	671151	114	101	98
BV4361.D	19439	143609	1145459	621103	116	103	96
BV4362.D	19440	146625	1124324	615806	115	102	96
BV4363.D	19438/10x	145999	1109124	615017	110	101	92

Cal Check Area BV4359.D 169098 1297830 759867

Surrogate 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

isv1184

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Page 4 of 7

Analysis Date 04/07/06
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
AV3442.D	MeOH Blank A 040706-2	145409	991272	560711	103	103	92
AV3443.D	19435/2000x	144960	981157	555775	103	102	91
AV3444.D	19431/100x	142607	1025526	599683	104	101	92
AV3446.D	19433/20000x	141246	984169	560176	105	102	90

Cal Check Area AV3440.D 149346 1019370 596328

Surrogate 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

isv1185

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Page 5 of 7

Analysis Date 04/11/06
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV4368.D	Soilk Bink B 041106-1	155652	1253517	691164	114	101	97
BV4370.D	LCS BS 72	156548	1282750	694514	115	100	94
BV4371.D	19461/10x	159757	1200699	686167	111	99	92
BV4372.D	19448	154177	1165276	637210	112	102	95
BV4373.D	19449	147299	1152582	632147	111	102	93
BV4374.D	19468	144848	1140277	629494	115	101	97
BV4375.D	19461/10x ms	138627	1174191	632479	106	100	90
BV4376.D	19461/10x msd	103195	787121	438579	107	98	89
BV4378.D	19446/5x	148948	1094606	597083	110	102	93
BV4379.D	19445/5x	163672	1180416	677612	106	99	93

Cal Check Area BV4367.D 169113 1295710 774674

			Surrogate 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

isv1186

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Page 6 of 7

Analysis Date 04/12/06
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV4391.D	MeOH Blank B 041206-1	197209	1563941	902786	103	100	98
BV4392.D	LCS-BM-02	193846	1572459	903822	103	100	96
BV4393.D	19441/100x	186560	1475737	860168	105	100	96
BV4394.D	19442/4000x	187292	1416399	809024	107	100	95
BV4395.D	19443/100x	172055	1350035	795075	108	99	96
BV4396.D	19444/50x	166660	1297375	774162	107	99	97
BV4397.D	19445/50x	168977	1292344	757620	107	99	98
BV4399.D	19444/50x ms	166009	1282133	765251	108	100	100
BV4400.D	19444/50x msd	165908	1281087	761723	106	99	98
BV4402.D	19444/100x	166963	1245239	749543	108	99	95

Cal Check Area BV4387.D 226687 1706020 953849

Surrogate 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

isv1188

Table 2.4 (cont.) Results of the Internal Standard Areas & Surrogate Percent Recoveries for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site

Page 7 of 7

Analysis Date 04/12/06
Matrix Soil

File ID	Sample No.	IS 1	IS 2	IS 3	Surr. 1	Surr. 2	Surr. 3
BV4418.D	Soil Blank B 041406-2	147538	1161431	641634	110	104	94
BV4420.D	LCS BS 77	138244	1167370	643586	110	102	91
BV4421.D	19447	101157	677292	396064	107	100	87

Cal Check Area BV4417.D 154397 1200300 732446

			Surrogate Limits		
				Water	Soil
IS 1	Bromochloromethane	Surr. 1	1,2-Dichloroethane-d4	76 - 114	70-121
IS 2	1,4-Difluorobenzene	Surr. 2	Toluene-d8	88 - 110	84-138
IS 3	Chlorobenzene-d5	Surr. 3	p-Bromofluorobenzene	86 - 115	59-113

isv1191

Table 2.5 Results of LCS Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Sample ID: LCS AM 60

Compound Name	LCS Spike Added (µg/Kg)	LCS Conc. (µg/Kg)	LCS % Rec.	QC Limits
				% Rec.
1,1-Dichloroethene	50.0	50	43.7	70 - 130
Benzene	50.0	50	42.8	70 - 130
Trichloroethene	50.0	50	42.6	70 - 130
Toluene	50.0	50	42.6	70 - 130
Chlorobenzene	50.0	50	41.0	70 - 130

Table 2.5 (cont.) Results of LCS Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Sample ID: LCS BS 71

Compound Name	LCS Spike Added (µg/Kg)	LCS Conc. (µg/Kg)	LCS % Rec.	QC Limits
				% Rec.
1,1-Dichloroethene	50.0	61.1	122	70 - 130
Benzene	50.0	48.5	97	70 - 130
Trichloroethene	50.0	48.3	97	70 - 130
Toluene	50.0	51.0	102	70 - 130
Chlorobenzene	50.0	49.8	100	70 - 130

Table 2.5 (cont.) Results of LCS Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Sample ID: LCS BS 72

Compound Name	LCS Spike Added (µg/Kg)	LCS Conc. (µg/Kg)	LCS % Rec.	QC Limits
				% Rec.
1,1-Dichloroethene	50.0	62.3	125	70 - 130
Benzene	50.0	48.9	98	70 - 130
Trichloroethene	50.0	49.1	98	70 - 130
Toluene	50.0	51.2	102	70 - 130
Chlorobenzene	50.0	50.1	100	70 - 130

Table 2.5 (cont.) Results of LCS Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Sample ID: LCS BM 02

Compound Name	LCS Spike Added (µg/Kg)	LCS Conc. (µg/Kg)	LCS % Rec.	QC Limits
				% Rec.
1,1-Dichloroethene	50.0	43.2	86	70 - 130
Benzene	50.0	43.5	87	70 - 130
Trichloroethene	50.0	41.8	84	70 - 130
Toluene	50.0	45.0	90	70 - 130
Chlorobenzene	50.0	46.1	92	70 - 130

Table 2.5 (cont.) Results of LCS Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Sample ID: LCS BS 77

Compound Name	LCS Spike Added (µg/Kg)	LCS Conc. (µg/Kg)	LCS % Rec.	QC Limits
				% Rec.
1,1-Dichloroethene	50.0	51.7	103	70 - 130
Benzene	50.0	43.8	88	70 - 130
Trichloroethene	50.0	43.7	87	70 - 130
Toluene	50.0	48.2	96	70 - 130
Chlorobenzene	50.0	48.9	98	70 - 130

Table 2.6 Results of MS/MSD Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Sample No. : 19434/10000x

Compound Name	Sample Conc. (µg/kg)	MS Spike Added (µg/kg)	MSD Spike Added (µg/kg)	MS Conc. (µg/kg)	MSD Conc. (µg/kg)	MS % Rec.	MSD % Rec.	RPD	RPD	QC Limits % Rec.
1,1-Dichloroethene	U	632911	632911	571519	667342	90	105	15	22	59 - 172
Benzene	U	632911	632911	612785	605696	97	96	1	21	66 - 142
Trichloroethene	U	632911	632911	591519	580253	93	92	2	24	62 - 137
Toluene	U	632911	632911	605696	602152	96	95	1	21	59 - 139
Chlorobenzene	U	632911	632911	590000	578228	93	91	2	21	60 - 133

msv745

Table 2.6 (cvont.) Results of MS/MSD Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Sample No. : 19428/10x

Compound Name	Sample Conc. (µg/kg)	MS Spike Added (µg/kg)	MSD Spike Added (µg/kg)	MS Conc. (µg/kg)	MSD Conc. (µg/kg)	MS % Rec.	MSD % Rec.	RPD	RPD	QC Limits % Rec.
1,1-Dichloroethene	U	667	667	1019	878	153	132	15	22	59 - 172
Benzene	U	667	667	691	651	104	98	6	21	66 - 142
Trichloroethene	U	667	667	711	662	107	99	7	24	62 - 137
Toluene	U	667	667	761	711	114	107	7	21	59 - 139
Chlorobenzene	U	667	667	723	684	108	103	5	21	60 - 133

msv746

Table 2.6 (cvont.) Results of MS/MSD Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Sample No. : 19461/10x

Compound Name	Sample Conc. (µg/kg)	MS Spike Added (µg/kg)	MSD Spike Added (µg/kg)	MS Conc. (µg/kg)	MSD Conc. (µg/kg)	MS % Rec.	MSD % Rec.	RPD	RPD	QC Limits % Rec.
1,1-Dichloroethene	U	676	676	862	631	128	93	31 *	22	59 - 172
Benzene	U	676	676	642	561	95	83	14	21	66 - 142
Trichloroethene	445	676	676	883	886	65	65	1	24	62 - 137
Toluene	U	676	676	688	588	102	87	16	21	59 - 139
Chlorobenzene	U	676	676	662	609	98	90	8	21	60 - 133

msv747

Table 2.6 (cvont.) Results of MS/MSD Analysis for VOC in Soil
WA # 0-111 Sabana Abajo Industrial Park PCE Site
Based on Dry Weight

Sample No. : 19444/50x

Compound Name	Sample Conc. (µg/kg)	MS Spike Added (µg/kg)	MSD Spike Added (µg/kg)	MS Conc. (µg/kg)	MSD Conc. (µg/kg)	MS % Rec.	MSD % Rec.	RPD	RPD	QC Limits % Rec.
1,1-Dichloroethene	U	3333	3333	3507	3733	105	112	6	22	59 - 172
Benzene	U	3333	3333	3323	3341	100	100	0	21	66 - 142
Trichloroethene	3137	3333	3333	6715	6393	107	98	9	24	62 - 137
Toluene	U	3333	3333	3364	3345	101	100	1	21	59 - 139
Chlorobenzene	U	3333	3333	3437	3354	103	101	2	21	60 - 133

msv748

CHAIN OF CUSTODY RECORD

Project Name: SABANAProject Number: EAC00111LM Contact: S GrossmanPhone: (732) 321-4230

No:

07017

Sheet 01 of 01 (Do not copy)
(for addnl. samples use new form)

EP-C-04-032

Sample Identification

Analyses Requested

REACT	Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	TIME	VOCs			
9866	19450	MW33	GW	8 April 2006	3	40 mL VIAL / 4°C	1116	✓			
9868	19451	MW30					1136				
9866	19452	MW21					1352				
9867	19453	MW17					1404				
9868	19454	MW2					1226				
9869	19455	MW2 (Dup)			↓		1226				
9870	19456	MW3 (X)			6		1516				
9871	19457	MW5	↓		3		1531				
9872	19458	Field Blank	W				1624				
9873	19459	Trip Blank	W				1630				
9874	19460	MW6	GW	↓	↓		1632				
9875	19462	MW34 (X)		10 April 2006	6		1145				
9876	19463	MW35			3		1415				
9877	19464	MW36					1510				
9878	19465	MW37					1555				
9879	19466	MW38	↓				1645				
9880	19467	Field Blank	W	↓	↓		1625	↓			
	19468										

Matrix:

A- Air
AT- Animal Tissue
DL- Drum Liquids
DS- Drum Solids
GW- Groundwater
O- Oil
PR- Product
PT- Plant Tissue

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

(X) MS/MSD

Special Instructions:

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #:

Received SOC 7/11/06

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished by	Date	Received by	Date	Time
ALL ANALYSIS	[Signature]	4/20/06	[Signature]	4/11/06	10:20	ALL ANALYSIS	[Signature]	4/11/06	[Signature]	4-11-06	11:00
ALL STOR.	[Signature]	4-20-06	[Signature]	4-20-06	11:00						

EPA Contract ~~68-C99-223~~

LM Contact: S Grossman

Phone: (732) 321-4230

07879

Sheet 01 of 01(Do not copy)
(for addnl. samples use new form)

Analyses Requested

[illegible]

Special Instructions:

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

④ $ms | msD$

* 2 vials from sample 19477 have headspace. Jm 4/13/06

Received 30C 2M413/06

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #:

Items/Reason	Relinquished by	Date	Received by	Date	Time
ALL/ANALYSIS	<i>[Signature]</i>	4/12/06	<i>[Signature]</i>	4/13/06	9:35
ALL/STOR.	<i>[Signature]</i>	4-20-06	<i>[Signature]</i>	4/20/06	11:00

EP-C-04-032

CHAIN OF CUSTODY RECORD

Project Name: SABANAProject Number: EACO-0111LM Contact: GROSSMANPhone: (732) 321-4230

No:

07873

Sheet 01 of 01 (Do not copy)

(for addnl. samples use new form)

Sample Identification

Analyses Requested

REAC	Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	TIME	Screening (PPM)	VOLs
9818	19438	MW 40 14.5'-15.0'	S	6 April 2006	1	4oz glass jar / 4°C	1335	0.5 ppm	X
9818	19439	Field Blank	↓	↓	2	40ml Vial / 4°C	1350	NA	X
9818	19440	Trip Blank	↓	↓	2	↓	1352	NA	X
<div>043</div>									

Matrix:

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

Special Instructions:

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #:

Received 40C JM

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished by	Date	Received by	Date	Time
ALL ANALYSIS	J. Newman	4/6/06	J. Newman	4/7/06	11:30	ALL ANALYSIS	J. Newman	4/7/06	J. Newman	4-7-06	11:40
ALL STDs	J. Newman	4-20-06	J. Newman	4/20/06	11:00						

EPA Contract ~~68-C99-223~~ (Q)
EP-C-04-032

Project Name: SABANA

Project Number: EAC011

LM Contact: S. Grossman Phone: 321-4230

No:

07874

Sheet 01 of 01(Do not copy)
(for addnl. samples use new form)

Analyses Requested

REACT	Sample No	Sampling Location	Matrix	Date Collected	# of Bottles	Container/Preservative	Time	Screen (ppm)	VOLs
9772	19426	MW37 13.0'-13.5'	S	4/4/06	1	402 glass / 4°C	1136	7.0	✓
9773	19427	Field Blank	S	4/4/06	2	40mL VIAL / 4°C	1200	3-20 NA	✓
9774	19428	MW38 4.5'-5.0'	S	4/5/06	1	402 glass / 4°C	1200	21.7 3.2	✓
9775	19429	MW38 7.5'-8.0'	S				1215	21.7	✓
9776	19430	MW38 9.5'-10.0'	S				1220	29.0	✓
9777	19431	MW38 13.5'-14.0'	S				1240	5.9	✓
9778	19432	MW38 4.5'-5.0'	S				1536	12.5	✓
9779	19433	MW39 6.5'-7.0'	S				1550	120	✓
9780	19434	MW39 9.5'-10.0'	S				1604	120	✓
9781	19435	MW39 14.5'-15.0'	S				1625	47	✓
9782	19436	Field Blank	S		2	40mL VIAL / 4°C	1650	NA	✓
9783	19437	Trip Blank	S		2		1650	NA	✓

Special Instructions:

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

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #:

Received 20C 7/19

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished by	Date	Received by	Date	Time
ALL/ANALYSIS	<i>[Signature]</i>	4/5/06	<i>Tracy Patton</i>	4/6/06	9:45	ALL/ANALYSIS	<i>Tracy Patton</i>	4/6/06	<i>J. Hens</i>	4-6-06	9:45
ALL/Star	<i>J. Hens</i>	4-20-06	<i>Tracy Patton</i>	4/20/06	11:00						

011 EP-C-04-032

CHAIN OF CUSTODY RECORD

Project Name: SABANA

Project Number: EAC 00111

LM Contact: S Grossman Phone: (732) 321-4230

No: 07876

Sheet 01 of 01(Do not copy)
(for addnl. samples use new form)

Sample Identification

Analyses Requested

[illegible]

Matrix:

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

Special Instructions:

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #:

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished by	Date	Received by	Date	Time
ALL/ANALYSIS	<i>[Signature]</i>	4/10/06	<i>[Signature]</i>	4/11/06	10:20	ALL/ANALYSIS	<i>[Signature]</i>	4/11/06	<i>[Signature]</i>	4-11-06	11:00
ALL/STOV.	<i>[Signature]</i>	4-20-06	<i>[Signature]</i>	4/20/06	11:00						

Received SEC 4/11/06

☆ U.S. GPO: 2000-501-151