FINAL

THIRD ANNUAL PROGRESS REPORT

Former Building 728
Facility ID #9-025049
Hunter Army Airfield, Georgia

Prepared for

U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT

Contract No. DACA21-02-D-0004
Delivery Order 0003

August 2002

DOCUMENT 10

FINAL

THIRD ANNUAL PILOT STUDY PROGRESS REPORT
FOR
FORMER BUILDING 728
FACILITY ID #9-025049
HUNTER ARMY AIRFIELD, GEORGIA

Prepared for
U.S. Army Corps of Engineers
Savannah District
Under Contract Number DACA21-02-D-0004
Delivery Order 0003

Prepared by
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION
P.O. Box 2501
Oak Ridge, TN 37831

August 2002

TABLE OF CONTENTS

LIST OF ACRONYMS

ACL	alternate concentration limit
AMSL	above mean sea level
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CAP	Corrective Action Plan
GA EPD	Georgia Environmental Protection Division
GUST	Georgia Underground Storage Tank
IWQS	In-Stream Water Quality Standard
MCL	maximum contaminant level
STL	soil threshold level
TPH	total petroleum hydrocarbons
UIC	Underground Injection Control

THIS PAGE INTENTIONALLY LEFT BLANK.

PROGRESS REPORT

Submittal Date: August 2002 Monitoring Report Number: 3rd Annual

For Period Covering: August 2001 to June 2002

Facility Name: Former Building 728 Street Address: Douglas Street and Duncan Drive

Facility ID: 9-025049 City: Hunter Army Airfield County: Chatham Zip Code: 31409

Latitude: 32° 01′ 50″ Longitude: 81° 08′ 04″

Submitted by UST Owner/Operator:		Prepared by Consultant/Contractor:	
Name:	Thomas C. Fry/ Environmental Branch	Name:	Patricia A. Stoll
Company:	U.S. Army/HQ 3d, Inf. Div (Mech)	Company:	SAIC
Address:	DPW ENRD ENV. Br. (Fry)	Address:	P.O. Box 2501
	1550 Frank Cochran Drive, Bldg 1137		
City:	Fort Stewart State: GA	City:	Oak Ridge State: TN
Zip Code:	31314-4927	Zip Code:	37831
Telephone:	(912) 767-2010	Telephone:	(865) 481-8792

REGISTERED PROFESSIONAL ENGINEER OR PROFESSIONAL GEOLOGIST CERTIFICATION

I hereby certify that I have directed and supervised the fieldwork and preparation of this plan, in accordance with State Rules and Regulations. As a registered professional geologist and/or professional engineer, I certify that I am a qualified groundwater professional, as defined by the Georgia State Board of Professional Geologists. All of the information and laboratory data in this plan and in all of the attachments are true, accurate, complete, and in accordance with applicable State Rules and Regulations.

Name: Patricia A. Stoll

Signature: Patricia A. Stoll

Date: 8/16/02

8/16/02

Georgia Stamp or Seal

THIS PAGE INTENTIONALLY LEFT BLANK.

1.0 INTRODUCTION

The Former Building 728 site is located at the southeast corner of Douglas Street and Duncan Drive within the confines of Hunter Army Airfield, as illustrated in Figure 1. The site is located within an average or higher groundwater pollution susceptibility area, is fewer than 500 feet from a withdrawal point, and is fewer than 500 feet from a surface water body. As defined in Georgia Underground Storage Tank (GUST) Management Rule 391-5-15.09, the appropriate soil threshold levels (STLs) are those presented in Table A, Column 1 of GUST Rules 291-5-15 because a withdrawal point is located fewer than 500 feet from the site and Table B, Column 1 of GUST Rules 391-5-15 because a surface water body is located fewer than 500 feet from the site. Thus, the Corrective Action Plan (CAP)–Part B Report (Metcalf & Eddy 1997) used the most conservative value for each compound as the applicable STL. The closest surface water body is a man-made, open-channel drainage ditch that is fed by an underground storm drain; therefore, the Georgia In-Stream Water Quality Standards (IWQSs) were used as screening criteria for groundwater.

The horizontal extent of the soil and groundwater contamination was determined during the CAP–Part B investigation. As part of the CAP–Part B Report, a corrective action was proposed to address the free product, soil contamination, and groundwater contamination. The corrective action consisted of a combination of free product removal, air sparging, and soil vapor extraction. The CAP–Part B Report was approved by the Georgia Environmental Protection Division (GA EPD) in correspondence dated September 4, 1998 (Coughlan 1998). Quarterly monitoring was initiated at the site in May 1998.

During a site visit by GA EPD on September 15, 1998, Fort Stewart proposed implementation of a pilot study consisting of oxygen injection across the entire groundwater plume to enhance the microbial biodegradation. During the oxygen injection, free product removal would continue in the product recovery wells. The CAP–Part B Addendum #1 and First Annual Pilot Study Progress Report was submitted to GA EPD in August 2000 (SAIC 2000). The report documented the changes to the corrective action proposed in the CAP–Part B Report and summarized the results of the remediation pilot study associated with the corrective action at the Northern Fuel Battery portion of the Former Building 728 site.

During the first year of the pilot study at the Northern Fuel Battery portion of the Former Building 728 site, the benzene concentrations and the plume area decreased. As a result, the oxygen injection and enhanced product recovery systems were retained as the corrective action at the site. Since the submittal of the CAP–Part B Addendum #1 and First Annual Pilot Study Progress Report in August 2000, site sampling has continued on a bimonthly basis. The Second Annual Progress Report (SAIC 2001) documented the results of the corrective action from July 2000 to June 2001. This Third Annual Progress Report documents the results of the corrective action from August 2001 to June 2002.

2.0 PRE-PILOT STUDY ACTIVITIES

The pre-pilot study activities in May 1999 consisted of installing five observation points, 24 injection points, and 24 product delineation points (Figure 2) and conducting a vadose zone pilot test and baseline sampling for soil and groundwater conditions. The specifics regarding these activities were summarized in the CAP–Part B Addendum #1 and First Annual Pilot Study Progress Report (SAIC 2000) submitted to GA EPD in August 2000. The well construction details are summarized in Table 1.

During the baseline soil sampling in May 1999, one soil sample was collected from each of the five observation points and analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and total

petroleum hydrocarbons (TPH), and one soil sample was collected from each of the 24 product delineation points; however, only ten samples were analyzed for BTEX and TPH, while eight samples were analyzed for TPH only. The samples from the product delineation points that were submitted to the analytical laboratory were from the borings in the vicinity of MW8 and the free product plume identified during the CAP–Part B investigation. The baseline analytical results for soil are presented in Table 2.

During the baseline groundwater sampling in May 1999, 15 locations were sampled for BTEX. The original monitoring locations for determining the effectiveness of the pilot study were MW6, MW11, MW60, MW61, MW63, MW64, P1, P2, P3, P4, P5, D1, D3, D4, and D21. The baseline groundwater sampling preformed in May 1999 indicated that the area of groundwater contamination covered approximately 22,700 ft^2. Benzene was detected in all 15 samples at concentrations ranging from 2.1J to 2,600 μg/L. Thirteen of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene alternate concentration limit (ACL) of 78 μg/L. The concentrations of toluene, ethylbenzene, and total xylenes did not exceed the IWQS of 200,000 μg/L; the IWQS of 28,718 μg/L; or the maximum contaminant level (MCL) of 10,000 μg/L, respectively. The baseline analytical results for groundwater are presented in Table 3 and Figure 3.

In May 1999, the groundwater flow direction was toward the northwest, and the average groundwater gradient was approximately 0.0105 foot/foot. Free product exceeding 1/8 inch (i.e., 0.01 foot) was observed in seven product delineation points (D7, D8, D10, D11, D12, D16, and D17). The area of free product was located north of MW59, extended toward MW8 and MW62, and covered an area of approximately 1,850 ft^2.

3.0 REMEDIAL ACTIVITIES

3.1 INITIAL FREE PRODUCT REMOVAL

From May 1999 through February 2000, the initial free product removal activities consisted of Ferret™ product recovery systems in wells MW59, MW62, MW8A, PR-1, PR-2, PR-3, PR-4, and PR-5. The details regarding the free product removal were described in the CAP–Part B Addendum #1 and First Annual Pilot Study Progress Report (SAIC 2000). The use of the Ferret™ product recovery systems was continued through August 2000, when it was determined that there was no longer any recoverable free product in recovery wells MW59, MW62, MW8A, PR-1, PR-2, PR-3, PR-4, and PR-5.

3.2 ENHANCED PRODUCT RECOVERY SYSTEM

In February 2000, an enhanced product recovery system that consisted of vacuum extraction in the product recovery wells (MW8A, MW59, PR-1 PR-2, PR-3, PR-4, and PR-5) and air injection into the injection wells (A-1 through A-6 and B-1 through B-6) was implemented at the site. The six injection wells on the A manifold are generally located through the central axis of the delineated free product area. The injection wells on the B manifold are generally located on the hydraulically upgradient side of the delineated free product area. The extraction and air injection wells are configured in a manner that induces a pressure gradient in the subsurface toward the existing recovery wells to enhance the migration of the product toward those wells. The details regarding the enhanced product recovery system were described in the CAP–Part B Addendum #1 and First Annual Pilot Study Progress Report (SAIC 2000).

Due to the lack of recoverable free product in the existing product recovery wells and the fact that the area of product appeared to be located in the middle of these wells, two additional product recovery wells (PR-6 and PR-7) were installed in April 2001 to assist in recovering product. However, after the installation and development, no measurable free product was identified, and product recovery systems have not been installed in these wells. The vacuum extraction and air injection continue to assist in reducing the soil contaminant levels.

3.3 OXYGEN INJECTION SYSTEM

The groundwater treatment system consists of an oxygen injection system that injects 98-percent-pure oxygen into the groundwater via multiple injection points at low flow rates. The injection of pure oxygen into groundwater using oxygen generators is a patented remediation process developed by Matrix Environmental, Inc. The remediation system consists of an AirSep AS80 pressure-swing adsorption oxygen generator that produces oxygen at a rate of 80 standard cubic feet per hour. The oxygen is stored in a 120-gallon receiver tank and pulse-sparged to up to 12 injection points at approximately 30 standard cubic feet per minute per point. The details regarding the oxygen injection system were described in the CAP–Part B Addendum #1 and First Annual Pilot Study Progress Report (SAIC 2000).

3.4 SYSTEM MONITORING AND SAMPLING

The oxygen injection system described above was operational on May 19, 1999, with oxygen being injected into two rows of injectors. One row was located downgradient of the free product plume and consisted of injectors J9 through J13. The other row was located upgradient of the free product plume and consisted of injectors J14 through J20. The injectors operating at any one time have changed periodically as plume conditions have changed. Three additional injector locations were installed in December 2000. Prior to injecting in these new locations, Science Applications International Corporation requested that the original Underground Injection Control (UIC) Permit #104 be amended to include the new injector locations. The oxygen was injected in accordance with the revised UIC Permit #104 for the Former Building 728 site. A copy of the UIC permit is provided in Appendix VII.

The results of the first year of monitoring (i.e., June 1999 through May 2000) are briefly summarized in the following sections, with additional details provided in the CAP–Part B Addendum #1 and First Annual Pilot Study Progress Report (SAIC 2000). The results of the second year of sampling (i.e., July 2000 through May 2001) are also summarized below, with additional details provided in the Second Annual Pilot Study Progress Report (SAIC 2001). A more detailed discussion of the results of the third year of monitoring (i.e., August 2001 through June 2002) follows the discussion of the second-year results.

3.4.1 First Sampling Event – June 1999

The oxygen injection system had been in operation for 1 month when the first sampling event was conducted with oxygen being injected into two rows of injectors (J9 through J13 and J14 through J20). The monitoring locations to determine the effectiveness of the pilot study were MW6, MW11, MW60, MW61, MW63, MW64, P1, P2, P3, P4, P5, D1, D3, D4, and D21.

The groundwater sampling performed in June 1999 indicated that the area of groundwater contamination covered approximately 18,600 ft^2. Benzene was detected in all 15 samples at concentrations ranging 3J μg/L to 3,370 μg/L. Ten of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene ACL of 78 μg/L. The concentrations of toluene, ethylbenzene, and total xylenes did not exceed the IWQS of

200,000 µg/L; the IWQS of 28,718 µg/L; or the MCL of 10,000 µg/L, respectively. The analytical results for groundwater are presented in Table 3.

In June 1999, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.0103 foot/foot, and the average groundwater elevation was 12.56 feet above mean sea level (AMSL). A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in five product delineation points (i.e., D6, D7, D10, D11, and D16). The area of free product was located north of MW59, extended toward MW8 and MW62, and covered an area of approximately 1,800 ft^2. Free product recovery in June 1999 consisted of Ferret™ product recovery systems in MW8A, MW59, and PR-2.

3.4.2 Second Sampling Event – July 1999

The oxygen injection system had been in operation for 2 months when the second sampling event was conducted with oxygen being injected into two rows of injectors (J9 through J13 and J14 through J20). The monitoring locations to determine the effectiveness of the pilot study were MW6, MW11, MW60, MW61, MW63, MW64, P1, P2, P3, P4, P5, D1, D3, D4, and D21.

The groundwater sampling performed in July 1999 indicated that the area of groundwater contamination covered approximately 17,050 ft^2. Benzene was detected in 13 of 15 samples at concentrations ranging 0.82J µg/L to 3,430 µg/L. Nine of the concentrations exceeded the IWQS of 71.28 µg/L and the benzene ACL of 78 µg/L. The concentrations of toluene, ethylbenzene, and total xylenes did not exceed the IWQS of 200,000 µg/L; the IWQS of 28,718 µg/L; or the MCL of 10,000 µg/L, respectively. The analytical results for groundwater are presented in Table 3.

In July 1999, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.0142 foot/foot, and the average groundwater elevation was 14.19 feet AMSL. Prior to the July 1999 sampling event, a 100-year rain event occurred during the first week of July. A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in seven product delineation points (i.e., D6, D8, D10, D11, D15, D16, and D17). The area of free product was located near MW59, extended toward MW8 and MW62, and was separated into two areas of approximately 2,375 ft^2 and 500 ft^2. Free product recovery in July 1999 consisted of Ferret™ product recovery systems in MW8A, MW59, and PR-2.

3.4.3 Third Sampling Event – August 1999

The oxygen injection system had been in operation for 3 months when the third sampling event was conducted with oxygen being injected into two rows of injectors (J9 through J13 and J14 through J20). The monitoring locations to determine the effectiveness of the pilot study were MW6, MW11, MW60, MW61, MW63, MW64, P1, P2, P3, P4, P5, D1, D3, D4, and D21.

The groundwater sampling performed in August 1999 indicated that the area of groundwater contamination covered approximately 18,000 ft^2. Benzene was detected in 12 of 15 samples at concentrations ranging 13.7 µg/L to 3,460 µg/L. Eight of the concentrations exceeded the IWQS of 71.28 µg/L and the benzene ACL of 78 µg/L. The concentrations of toluene, ethylbenzene, and total xylenes did not exceed the IWQS of 200,000 µg/L; the IWQS of 28,718 µg/L; or the MCL of 10,000 µg/L, respectively. The analytical results for groundwater are presented in Table 3.

In August 1999, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.0111 foot/foot, and the average groundwater elevation was 12.97 feet AMSL. A list of the

wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in five product delineation points (i.e., D6, D9, D10, D11, and D16). The area of free product was located near MW59, extended toward MW8, and covered an area of approximately 1,950 ft^2. Free product recovery in August 1999 consisted of Ferret™ product recovery systems in MW8A, MW59, and PR-2.

3.4.4 Fourth Sampling Event – September 1999

The oxygen injection system had been in operation for 4 months when the fourth sampling event was conducted. The locations of the oxygen injectors in operation were modified after the August 1999 sampling event to three rows of injectors (J2 through J4, J5 through J8, and J9 through J13). The monitoring locations to determine the effectiveness of the pilot study were MW6, MW11, MW60, MW61, MW63, MW64, P1, P2, P3, P4, P5, D1, D3, D4, and D21.

The groundwater sampling performed in September 1999 indicated that the area of groundwater contamination covered approximately 14,875 ft^2. Benzene was detected in 12 of 15 samples at concentrations ranging 2.4 µg/L to 3,710 µg/L. Seven of the concentrations exceeded the IWQS of 71.28 µg/L and the benzene ACL of 78 µg/L. The concentrations of toluene, ethylbenzene, and total xylenes did not exceed the IWQS of 200,000 µg/L; the IWQS of 28,718 µg/L; or the MCL of 10,000 µg/L, respectively. The analytical results for groundwater are presented in Table 3.

In September 1999, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.0103 foot/foot, and the average groundwater elevation was 13.93 feet AMSL. A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in six product delineation points (i.e., D6, D7, D10, D11, D16, and D17). The area of free product was located near MW59, extended toward MW8, and covered an area of approximately 2,225 ft^2. Free product recovery in September 1999 consisted of Ferret™ product recovery systems in MW8A, MW59, and PR-2.

3.4.5 Fifth Sampling Event – October 1999

The oxygen injection system had been in operation for 5 months when the fifth sampling event was conducted. The locations of the oxygen injectors in operation were modified to three rows of injectors (J2 through J4, J5 through J8, and J9 through J13) in August 1999. The monitoring locations to determine the effectiveness of the pilot study were MW6, MW11, MW60, MW61, MW63, MW64, P1, P2, P3, P4, P5, D1, D3, D4, and D21.

The groundwater sampling that was performed in October 1999 indicated that the area of groundwater contamination covered approximately 15,475 ft^2. Benzene was detected in 14 of 15 samples at concentrations ranging 0.78J µg/L to 3,760 µg/L. Six of the concentrations exceeded the IWQS of 71.28 µg/L and the benzene ACL of 78 µg/L. The concentrations of toluene, ethylbenzene, and total xylenes did not exceed the IWQS of 200,000 µg/L; the IWQS of 28,718 µg/L; or the MCL of 10,000 µg/L, respectively. The analytical results for groundwater are presented in Table 3.

In October 1999, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.0125 foot/foot, and the average groundwater elevation was 13.27 feet AMSL. A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in eight product delineation points (i.e., D6, D7, D8, D10, D11, D15, D16, and D17). The area of free product was located near MW59, extended toward MW8 and MW62, and covered an area of approximately 2,850 ft^2. Free product recovery in October 1999 consisted of Ferret™

product recovery systems in MW8A, MW59, and PR-2. Prior to the fifth sampling event, three additional free product recovery wells (PR-3, PR-4, and PR-5) were installed at the site in October 1999 and equipped with Ferret™ product recovery systems.

3.4.6 Sixth Sampling Event – November/December 1999

The oxygen injection system had been in operation for 7 months when the sixth sampling event was conducted. The locations of the oxygen injectors in operation were changed back to the original two rows of injectors (J9 through J13 and J14 through J20) in October 1999. The monitoring locations to determine the effectiveness of the pilot study were MW6, MW11, MW60, MW61, MW63, MW64, P1, P2, P3, P4, P5, D1, D3, D4, and D21.

The groundwater sampling performed in November/December 1999 indicated that the area of groundwater contamination covered approximately 8,575 ft^2. Benzene was detected in 15 of 15 samples at concentrations ranging 1J μg/L to 3,700 μg/L. Seven of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene ACL of 78 μg/L. The concentrations of toluene, ethylbenzene, and total xylenes did not exceed the IWQS of 200,000 μg/L; the IWQS of 28,718 μg/L; or the MCL of 10,000 μg/L, respectively. The analytical results for groundwater are presented in Table 3.

In December 1999, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.0106 foot/foot, and the average groundwater elevation was 12.18 feet AMSL. A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in seven product delineation points (i.e., D6, D9, D10, D11, D15, D16, and D17). The area of free product had separated into two areas. The largest area was located near MW59, extended toward MW8, and covered an area of approximately 1,500 ft^2. The smaller area covered an area of approximately 340 ft^2. Free product recovery in December 1999 consisted of Ferret™ product recovery systems in MW8A, MW59, PR-2, PR-3, PR-4, and PR-5.

3.4.7 Seventh Sampling Event – January 2000

The oxygen injection system had been in operation for 8 months when the seventh sampling event was conducted. The locations of the oxygen injectors in operation were changed back to the original two rows of injectors (J9 through J13 and J14 through J20) in October 1999. The monitoring locations to determine the effectiveness of the pilot study were MW6, MW11, MW60, MW61, MW63, MW64, P1, P2, P3, P4, P5, D1, D3, D4, and D21.

The groundwater sampling that was performed in January 2000 indicated that the area of groundwater contamination covered approximately 10,650 ft^2. Benzene was detected in 15 of 15 samples at concentrations ranging 0.2J μg/L to 2,210J μg/L. Seven of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene ACL of 78 μg/L. The concentrations of toluene, ethylbenzene, and total xylenes did not exceed the IWQS of 200,000 μg/L; the IWQS of 28,718 μg/L; or the MCL of 10,000 μg/L, respectively. The analytical results for groundwater are presented in Table 3.

In January 2000, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.0111 foot/foot, and the average groundwater elevation was 12.38 feet AMSL. A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in six product delineation points (i.e., D6, D8, D10, D11, D16, and D17). The area of free product has separated into two areas. The largest area was located near MW59, extended toward MW8, and covered an area of approximately 1,770 ft^2. The second smaller area covered

an area of approximately 100 ft^2 and was located near MW62. Free product recovery in January 2000 consisted of Ferret™ product recovery systems in MW8A, MW59, PR-2, PR-3, PR-4, and PR-5.

In February 2000, an enhanced product recovery system consisting of air injection with vacuum extraction to induce a pressure gradient in the subsurface to enhance the migration of the product toward the recovery wells was brought on-line at the site.

3.4.8 Eighth Sampling Event – March 2000

The oxygen injection system had been in operation for 10 months when the eighth sampling event was conducted. The locations of the oxygen injectors in operation were modified in January 2000. The row of oxygen injectors (J9 through J13) downgradient of the free product remained in operation. The oxygen injection locations (J2 through J4, J7, and J18 through J20) were spread throughout the long, thin plume running parallel to the storm drain. Monitoring locations MW64, P5, and D21 were dropped from the monitoring program in lieu of D6, D10, and D17. The monitoring locations to determine the effectiveness of the pilot study were MW6, MW11, MW60, MW61, MW63, P1, P2, P3, P4, D1, D3, D4, D6, D10, and D17.

The groundwater sampling performed in March 2000 indicated that the area of groundwater contamination had separated into two plumes. One was long and thin and ran parallel to the storm drain, while the other was in the vicinity of the free product. The areas of contamination were approximately 6,450 ft^2 and 3,000 ft^2. Benzene was detected in 12 of 15 samples at concentrations ranging 2.4 μg/L to 1,820 μg/L. Nine of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene ACL of 78 μg/L. The concentrations of toluene, ethylbenzene, and total xylenes did not exceed the IWQS of 200,000 μg/L; the IWQS of 28,718 μg/L; or the MCL of 10,000 μg/L, respectively. The analytical results for groundwater are presented in Table 3.

In March 2000, the groundwater flow direction was toward the north and northwest, the groundwater gradient was approximately 0.0227 foot/foot, and the average groundwater elevation was 13.05 feet AMSL. A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in four product delineation points (i.e., D6, D10, D11, and D24). The area of free product had separated into two areas. The largest area was located near MW59, extended toward MW8, and covered an area of approximately 580 ft^2. The second, smaller area covered an area of approximately 213 ft^2 and was located near D24. Free product recovery in March 2000 consisted of Ferret™ product recovery systems in MW8A, MW59, PR-2, PR-3, PR-4, and PR-5 in conjunction with the enhanced product removal system implemented in February 2000.

3.4.9 Ninth Sampling Event – May 2000

The oxygen injection system had been in operation for 12 months (i.e., 1 year) when the ninth sampling event was conducted. The locations of the oxygen injectors in operation (J2 through J4, J7, J9 through J13, and J18 through J20) had last been modified in January 2000. The monitoring locations to determine the effectiveness of the pilot study were MW6, MW11, MW60, MW61, MW63, P1, P2, P3, P4, D1, D3, D4, D6, D10, and D17.

The groundwater sampling performed in May 2000 indicated that the area of groundwater contamination continued to be separated into two plumes. One was long and thin and ran parallel to the storm drain, while the other was in the vicinity of the free product. The areas of contamination were approximately 6,550 ft^2 and 2,665 ft^2. Benzene was detected in 13 of 15 samples at concentrations ranging 2.3 μg/L to 2,010J μg/L. Eight of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene ACL of 78 μg/L. The concentrations of toluene, ethylbenzene, and total xylenes did not exceed the IWQS of 200,000 μg/L;

the IWQS of 28,718 μg/L; or the MCL of 10,000 μg/L, respectively. The analytical results for groundwater are presented in Table 3.

In May 2000, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.0095 foot/foot, and the average groundwater elevation was 12.54 feet AMSL. A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in two product delineation points (i.e., D10 and D18). The area of free product had separated into two areas. One area was located near MW59, extended toward MW8, and covered an area of approximately 188 ft^2. The second area covered an area of approximately 271 ft^2 and was located near D18. Free product recovery in May 2000 consisted of Ferret™ product recovery systems in MW8A, MW59, PR-2, PR-3, PR-4, and PR-5 in conjunction with the enhanced product removal system implemented in February 2000.

3.4.10 Tenth Sampling Event – July 2000

The oxygen injection system had been in operation for 14 months (i.e., 1.2 years) when the tenth sampling event was conducted. The locations of the oxygen injectors in operation (J2 through J4, J7, J9 through J13, and J18 through J20) had last been modified in January 2000. The monitoring locations to determine the effectiveness of the pilot study were MW6, MW11, MW60, MW61, MW63, P1, P2, P3, P4, D1, D3, D4, D6, D10, and D17.

The groundwater sampling performed in July 2000 indicated that the area of groundwater contamination continued to be separated into two plumes. One was long and thin and ran parallel to the storm drain, while the other was in the vicinity of the free product. The areas of contamination were approximately 5,250 ft^2 and 2,550 ft^2. Benzene was detected in 14 of 15 samples at concentrations ranging 1.6 μg/L to 912 μg/L. Six of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene ACL of 78 μg/L. The concentrations of toluene, ethylbenzene, and total xylenes did not exceed the IWQS of 200,000 μg/L; the IWQS of 28,718 μg/L; or the MCL of 10,000 μg/L, respectively. The analytical results for groundwater are presented in Table 3.

In July 2000, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.013 foot/foot, and the average groundwater elevation was 12.03 feet AMSL. A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in two product delineation points (i.e., D10 and D11). There was only one area of free product. The area was located near PR-2, extended toward PR-4, and covered an area of approximately 679 ft^2. On July 23, 2000, the Ferret™ product recovery systems were removed from MW8A, MW59, PR-2, PR-3, PR-4, and PR-5, and the enhanced product removal system was shut down. On July 25, 2000, wells PR-2 and MW59 contained 0.01 foot and 0.08 foot, respectively, of free product. None of the other product recovery wells contained any measurable free product. Well MW59 was the only well to have a Ferret™ product recovery system reinstalled. The enhanced product removal system was operational again on July 25, 2000. Neither the oxygen injection locations nor the monitoring locations were changed for the next sampling event in September 2000.

3.4.11 Eleventh Sampling Event – September 2000

The oxygen injection system had been in operation for 16 months (i.e., 1.3 years) when the eleventh sampling event was conducted. The locations of the oxygen injectors in operation (J2 through J4, J7, J9 through J13, and J18 through J20) had last been modified in January 2000. The monitoring locations to determine the effectiveness of the pilot study were MW6, MW11, MW60, MW61, MW63, P1, P2, P3, P4, D1, D3, D4, D6, D10, and D17.

The groundwater sampling performed in September 2000 indicated that the area of groundwater contamination continued to be separated into two plumes. One was long and thin and located downgradient of the free product area, while the other was in the vicinity of the free product. The areas of contamination were approximately 6,750 ft^2 and 2,350 ft^2. Benzene was detected in 15 of 15 samples at concentrations ranging from 0.3J μg/L to <2,500 μg/L. Five of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene ACL of 78 μg/L. Ethylbenzene was detected in 14 of 15 samples at concentrations ranging from 0.4J μg/L to 60,000 μg/L. The concentration in D10 exceeded the IWQS of 28,718 μg/L. Total xylenes were detected in 15 of 15 samples at concentrations ranging from 0.15J μg/L to 617,000 μg/L. The concentration in D10 exceeded the total xylenes MCL of 10,000 μg/L. The concentrations of toluene did not exceed the IWQS of 200,000 μg/L. The analytical results for groundwater are presented in Table 3.

In September 2000, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.011 foot/foot, and the average groundwater elevation was 13.91 feet AMSL. A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in three product delineation points (i.e., D10, D11 and D17). There was only one area of free product that was located between product recovery wells MW59, PR-2, PR-3, and PR-4. This area covered approximately 669 ft^2. The Ferret™ product recovery system in MW59 was shut off on August 22, 2000, because there was not significant product recovery. On November 2, 2000, the Ferret™ system was removed from MW59, and there was no measurable free product observed in MW8A, MW59, PR-2, PR-3, PR-4, and PR-5. As of November, no Ferret™ product recovery systems were installed in any of the recovery wells at the site; however, the enhanced product recovery system continued to operate during this time period.

In August 2000, the Matrix system had power problems, and the circuit breakers were tripped. The system was off for approximately 1 to 2 weeks. Representatives from the compressor manufacturer indicated that the system had a “ronk add-a-phase” problem, and as a result, the three-phase converter was rebalanced in October 2000. In addition, the air injection portion of the enhanced recovery system seized up and needed to be replaced. The vacuum extraction portion of the system continued to operate uninterrupted.

Due to the changing plume boundaries, sample locations MW6, MW11, P3, and D1 were removed from the monitoring plan following the September 2000 sampling event. Locations D7, D9, D12, D14, and D19 were added to provide additional monitoring coverage of the plume in the vicinity of the free product area. The oxygen injection locations were not changed for the next sampling event in November/December 2000.

3.4.12 Twelfth Sampling Event – November/December 2000

The oxygen injection system had been in operation for 18 months (i.e., 1.5 years) when the twelfth sampling event was conducted. The locations of the oxygen injectors in operation (J2 through J4, J7, J9 through J13, and J18 through J20) had last been modified in January 2000. The monitoring locations to determine the effectiveness of the pilot study were MW60, MW61, MW63, P1, P2, P4, D3, D4, D6, D7, D9, D10, D12, D14, D17, and D19.

The groundwater sampling performed in November/December 2000 indicated that the thin plume running parallel to the storm drain had dissipated to concentrations less than 10 μg/L. The plume in the vicinity of the free product area was roughly circular in shape and extended north to MW61 and from D9 west to P4. The area of contamination was approximately 7,600 ft^2. Benzene was detected in 16 of 16 samples at concentrations ranging from 0.56J μg/L to 1,140 μg/L. Seven of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene ACL of 78 μg/L. The concentrations of toluene, ethylbenzene, and total

xylenes did not exceed the IWQS of 200,000 µg/L; the IWQS of 28,718 µg/L; or the MCL of 10,000 µg/L, respectively. The analytical results for groundwater are presented in Table 3.

In November/December 2000, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.0097 foot/foot, and the average groundwater elevation was 12.09 feet AMSL. A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in one product delineation points (i.e., D10). There was only one area of free product located near PR-4 that covered an area of approximately 205 ft^2. Free product recovery in November/December 2000 consisted of operation of the enhanced product removal system. Due to the lack of recoverable free product, the Ferret™ product recovery systems were not installed in any of the product recovery wells.

The air injection portion of the enhanced recovery system remained shut down until the blower/compressor was replaced in November 2000 and a new motor was installed in December 2000. The air injection system was restarted in December 2000. The coupling joint between the motor and the blower/compressor was replaced in January 2001. In addition, the glass liquid-level tube on the vacuum condensate tank froze in January 2001 and was replaced in February 2001.

On January 10, 2001, the downgradient injectors J2, J3, and J4 were turned off because the benzene concentrations in this area of the site had decreased below 10 µg/L. Injectors J5, J6, and J8 were turned on to form the row of injectors located on the leading edge of the groundwater plume. The monitoring locations were not changed for the next sampling event in February 2001.

3.4.13 Thirteenth Sampling Event – February 2001

The oxygen injection system had been in operation for 21 months (i.e., 1.8 years) when the thirteenth sampling event was conducted. The locations of the oxygen injectors in operation (J5 through J9 and J13 through J18 and J20) had last been modified in January 2001. The monitoring locations to determine the effectiveness of the pilot study were MW60, MW61, MW63, P1, P2, P4, D3, D4, D6, D7, D9, D10, D12, D14, D17, and D19.

The groundwater sampling performed in February 2001 indicated that the plume was roughly circular in shape and extended from D19 north to MW61 and from D9 west to P4. The area of contamination was approximately 7,500 ft^2. Benzene was detected in 16 of 16 samples at concentrations ranging from 0.28J µg/L to 1,180 µg/L. Five of the concentrations exceeded the IWQS of 71.28 µg/L and four exceeded the benzene ACL of 78 µg/L. The concentrations of toluene, ethylbenzene, and total xylenes did not exceed the IWQS of 200,000 µg/L; the IWQS of 28,718 µg/L; or the MCL of 10,000 µg/L, respectively. The analytical results for groundwater are presented in Table 3.

In February 2001, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.012 foot/foot, and the average groundwater elevation was 12.14 feet AMSL. A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in four product delineation points (i.e., D3, D6, D10, and D11). Two areas of free product were observed. One area was located between product recovery wells PR-2, PR-4, and PR-5 and covered an area of approximately 745 ft^2. The second covered an area of approximately 65 ft^2 and was located near D3. Free product recovery in February 2001 consisted of operation of the enhanced product removal system. Due to the lack of recoverable free product, the Ferret™ product recovery systems were not installed in any of the product recovery wells during this time period.

On January 31, 2001, the Matrix system was not maintaining pressure in the oxygen tank. Representatives from Matrix fixed the problem on February 21, 2001. On March 13, 2001, injector J8 was turned off because the benzene concentrations in this area of the site were less than 10 μg/L. Injector J27, which was installed to provide additional coverage within the middle of the groundwater plume, was turned on. The monitoring locations were not changed for the next sampling event in April 2001.

3.4.14 Fourteenth Sampling Event – April 2001

The oxygen injection system had been in operation for 23 months (i.e., 1.9 years) when the fourteenth sampling event was conducted. The locations of the oxygen injectors in operation (J5 through J7, J9 through J13, J18 through J20, and J27) had last been modified in March 2001. The monitoring locations to determine the effectiveness of the pilot study were MW60, MW61, MW63, P1, P2, P4, D3, D4, D6, D7, D9, D10, D12, D14, D17, and D19.

The groundwater sampling performed in April 2001 indicated that the plume was roughly circular in shape and extended from D19 north to MW61 and from D9 west to P4. The area of contamination was approximately 7,100 ft^2. Benzene was detected in 15 of 16 samples at concentrations ranging from 0.27J μg/L to 476 μg/L. Five of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene ACL of 78 μg/L. Total xylenes were detected in 13 of 16 samples at concentrations ranging from 0.93J μg/L to 14,700 μg/L. The concentration in D10 exceeded the total xylenes MCL of 10,000 μg/L. The concentrations of toluene and ethylbenzene did not exceed the IWQSs of 200,000 μg/L and 28,718 μg/L, respectively. The analytical results for groundwater are presented in Table 3.

In April 2001, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.013 foot/foot, and the average groundwater elevation was 12.49 feet AMSL. A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was observed in one product delineation point (i.e., D11). The area of free product was located between product recovery wells PR-2, and PR-4 and covered an area of approximately 182 ft^2.

Prior to the fourteenth sampling event, two additional free product recovery wells (PR-6 and PR-7) were installed at the site in April 2001. Product delineation point D3 was overdrilled for the installation of well PR-6, and well PR-7 was drilled in the vicinity of product delineation point D10. Boring logs and well construction diagrams were provided in the Second Annual Progress Report (SAIC 2001). No measurable free product was observed in these wells following well development activities. Free product recovery in April 2001 consisted of operation of the enhanced product removal system. Due to the lack of recoverable free product, the Ferret™ product recovery systems were not installed in any of the product recovery wells during this time period.

In April 2001, the condensate pump in the condensate tank was not working. In May 2001, new floats were installed in the tank, and the system was restarted. In addition, the main electrical box was replaced on the Matrix system, and the discharge piping of the vacuum extraction system was cleaned out. Neither the oxygen injection locations nor the monitoring locations were changed for the next sampling event in June 2001.

3.4.15 Fifteenth Sampling Event – June 2001

The oxygen injection system had been in operation for 24 months (i.e., 2.0 years) when the fifteenth sampling event was conducted. The locations of the oxygen injectors in operation (J5 through J7, J9 through J13, J18 through J20, and J27) had last been modified in March 2001. The monitoring locations to

determine the effectiveness of the pilot study were MW60, MW61, MW63, P1, P2, P4, D3, D4, D6, D7, D9, D10, D12, D14, D17, and D19.

The groundwater sampling performed in June 2001 indicated that the plume was roughly circular in shape and extended from D19 north to D3 and from D9 west to P4. The area of contamination was approximately 5,350 ft^2. Benzene was detected in 14 of 16 samples at concentrations ranging from 0.35J μg/L to 988 μg/L. Six of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene ACL of 78 μg/L. The concentrations of toluene, ethylbenzene, and total xylenes did not exceed the IWQS of 200,000 μg/L; the IWQS of 28,718 μg/L; or the MCL of 10,000 μg/L, respectively. The analytical results for groundwater are presented in Table 3.

In June 2001, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.011 foot/foot, and the average groundwater elevation was 12.09 feet AMSL. A list of the wells and corresponding water-level and product depths is presented in Table 4. Free product exceeding 1/8 inch (i.e., >0.01 foot) was not observed in any of the product delineation points.

Free product recovery in June 2001 consisted of operation of the enhanced product removal system. Due to the lack of recoverable free product, the Ferret™ product recovery systems were not installed in any of the product recovery wells during this time period.

In mid-May 2001, the condensate pump was not working, and the tank was full, causing the vacuum system to shut down. In June, water was pumped out of the tank, and maintenance was performed on the entire system. When the systems were restarted, the vacuum was lowered to prevent as much water from being extracted. In July, the condensate tank had to again be emptied. Filters in the vacuum system were replaced, as was the gasket between the motor and the compressor of the blower system. Neither the oxygen injection locations nor the monitoring locations were changed for the next sampling event in August 2001.

3.4.16 Sixteenth Sampling Event – August 2001

The oxygen injection system had been in operation for 26 months (i.e., 2.2 years) when the sixteenth sampling event was conducted. The locations of the oxygen injectors in operation had last been modified in March 2001, as shown in Figure 4. The row of oxygen injectors (J5 through J7) downgradient of the groundwater plume was in operation. The oxygen injectors (J9 through J13) on the leading edge of the plume were in operation, and the oxygen injectors located within the groundwater plume (J18 through J20 and J27) were in operation. The monitoring locations to determine the effectiveness of the pilot study were MW60, MW61, MW63, P1, P2, P4, D3, D4, D6, D7, D9, D10, D12, D14, D17, and D19.

Sixteen monitoring locations were sampled for BTEX on August 8, 2001. Analytical results for groundwater sampling are summarized in Table 3 and presented in Figure 4. The laboratory results of the August 2001 sampling event are provided in Appendix V and summarized below.

- Benzene was detected in 15 of 16 samples at concentrations ranging from 0.17J μg/L to 885 μg/L. Three of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene ACL of 78 μg/L.

- Toluene was detected in two of 16 samples at concentrations of 10.2 μg/L and 28.5 μg/L. None of the concentrations exceeded the toluene IWQS of 200,000 μg/L.

- Ethylbenzene was detected in 12 of 16 samples at concentrations ranging from 0.20J μg/L to 901 μg/L. None of the concentrations exceeded the ethylbenzene IWQS of 28,718 μg/L.

- Total xylenes were detected in 16 of 16 samples at concentrations ranging from 0.38J μg/L to 2,630 μg/L. A Georgia IWQS for xylenes does not exist, but none of the concentrations exceeded the MCL of 10,000 μg/L.

As shown in Figure 4, the area of groundwater contamination was oblong in shape and extended from D19 north to D3/PR-6 and from D9 west to PR-4. Low concentrations of BTEX compounds were also detected north of this larger plume in MW61, where constituents were last detected in April 2001. The areas of contamination were approximately 5,050 ft^2 and 190 ft^2 around MW61, as indicated in Table 5. Of the 16 wells sampled in August 2001, three wells (D6, D7, and D9) exceeded the IWQS for benzene, as compared to six during the previous sampling event. Within the plume, there was one well (D9) at which the benzene concentration exceeded 500 μg/L. The concentrations of benzene in MW60, MW61, P2, P4, D3/PR-6, and D4, which are located downgradient of the groundwater plume, were below the IWQS.

Groundwater elevations were measured in the monitoring wells on August 6, 2001, to determine the groundwater flow direction. A list of the wells and corresponding water-level elevations is presented in Table 4. The potentiometric surface map generated from the water-level measurements is presented in Figure 5. In August 2001, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.014 foot/foot, and the average groundwater elevation was 12.03 feet AMSL.

Depth to free product and free product thickness are presented in Table 4. In August 2001, free product exceeding 1/8 inch (i.e., >0.01 foot) was not observed in any of the product delineation points. Free product recovery in August 2001 consisted of operation of the enhanced product removal system. Neither the oxygen injection locations nor the monitoring locations were changed for the next sampling event in October 2001.

3.4.17 Seventeenth Sampling Event – October 2001

The oxygen injection system had been in operation for 28 months (i.e., 2.3 years) when the seventeenth sampling event was conducted. The locations of the oxygen injectors in operation had last been modified in March 2001, as shown in Figure 6. The row of oxygen injectors (J5 through J7) downgradient of the groundwater plume was in operation. The oxygen injectors (J9 through J13) on the leading edge of the plume were in operation, and the oxygen injectors located within the groundwater plume (J18 through J20 and J27) were in operation. The monitoring locations to determine the effectiveness of the pilot study were MW60, MW61, MW63, P1, P2, P4, D3, D4, D6, D7, D9, D10, D12, D14, D17, and D19.

Sixteen monitoring locations were sampled for BTEX on October 4, 2001. Analytical results for groundwater sampling are summarized in Table 3 and presented in Figure 6. The laboratory results of the October 2001 sampling event are provided in Appendix V and summarized below.

- Benzene was detected in 16 of 16 samples at concentrations ranging from 0.20J μg/L to 643 μg/L. Four of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene ACL of 78 μg/L.

- Toluene was detected in ten of 16 samples at concentrations ranging from 0.26J μg/L to 20.3 μg/L. None of the concentrations exceeded the toluene IWQS of 200,000 μg/L.

- Ethylbenzene was detected in 13 of 16 samples at concentrations ranging from 0.40J μg/L to 734 μg/L. None of the concentrations exceeded the ethylbenzene IWQS of 28,718 μg/L.

- Total xylenes were detected in 15 of 16 samples at concentrations ranging from 0.20J μg/L to 2,720 μg/L. A Georgia IWQS for xylenes does not exist, but none of the concentrations exceeded the MCL of 10,000 μg/L.

As shown in Figure 6, the area of groundwater contamination continued to be oblong in shape and extended from D19 north to D3/PR-6 and from D9 west to PR-4. Low concentrations of BTEX compounds were also detected north of this plume in MW61 and northwest of this plume in P1. The areas of contamination were approximately 5,350 ft^2, 200 ft^2 around MW61, and 150 ft^2 around P1, as indicated in Table 5. Of the 16 wells sampled in October 2001, four (D4, D6, D7, and D9) exceeded the IWQS for benzene, as compared to three during the previous sampling event. Within the plume, there was one well (D9) at which the benzene concentration exceeded 500 μg/L. The concentrations of benzene in MW60, MW61, P2, P4, and D3/PR-6, which are located downgradient of the groundwater plume, were below the IWQS.

Groundwater elevations were measured in the monitoring wells on October 3, 2001, to determine the groundwater flow direction. A list of the wells and corresponding water-level elevations is presented in Table 4. The potentiometric surface map generated from the water-level measurements is presented in Figure 7. In October 2001, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.018 foot/foot, and the average groundwater elevation was 12.09 feet AMSL.

Depth to free product and free product thickness are presented in Table 4. In October 2001, free product exceeding 1/8 inch (i.e., >0.01 foot) was not observed in any of the product delineation points. Free product recovery in October 2001 consisted of operation of the enhanced product removal system.

On October 2, 2001, the circuit breakers associated with the Matrix system were tripped. The Matrix system was restarted on October 2, 2001. Also on October 2, 2001, the condensate pump/vapor-level alarm was inoperable due to a problem with the float. The system was restarted without the blower.

On November 7, 2001, a new float was installed in the vacuum extraction system. Also in November 2001, injectors J5, J6, and J7 downgradient of the plume were turned off because benzene concentrations in this area of the site had decreased to below 10 μg/L. Injectors J16 and J17 were turned on to reduce the contaminant concentrations in the southern portion of the plume. Injector J25 was turned on to help remediate the plume around MW61. The monitoring locations were not changed for the next sampling event in December 2001.

3.4.18 Eighteenth Sampling Event – December 2001

The oxygen injection system had been in operation for 30 months (i.e., 2.5 years) when the eighteenth sampling event was conducted. The locations of the oxygen injectors in operation had last been modified in November 2001, as shown in Figure 8. The row of oxygen injectors (J9 through J13) on the leading edge of the plume was in operation, and the oxygen injectors (J16 through J20, J25 and J27) located within the groundwater plume were in operation. The monitoring locations to determine the effectiveness of the pilot study were MW60, MW61, MW63, P1, P2, P4, D3, D4, D6, D7, D9, D10, D12, D14, D17, and D19.

Sixteen monitoring locations were sampled for BTEX on December 1, 2001. Analytical results for groundwater sampling are summarized in Table 3 and presented in Figure 8. The laboratory results of the December 2001 sampling event are provided in Appendix V and summarized below.

- Benzene was detected in 12 of 16 samples at concentrations ranging from 0.41J μg/L to 882 μg/L. Four of the concentrations exceeded the IWQS of 71.28, and three exceeded the benzene ACL of 78 μg/L.

- Toluene was detected in one of 16 samples at a concentration of 14.0 µg/L. None of the concentrations exceeded the toluene IWQS of 200,000 µg/L.

- Ethylbenzene was detected in 12 of 16 samples at concentrations ranging from 0.26J µg/L to 682 µg/L. None of the concentrations exceeded the ethylbenzene IWQS of 28,718 µg/L.

- Total xylenes were detected in 11 of 16 samples at concentrations ranging from 1.2J µg/L to 2,340 µg/L. A Georgia IWQS for xylenes does not exist, but none of the concentrations exceeded the MCL of 10,000 µg/L.

As shown in Figure 8, the area of groundwater contamination was roughly circular in shape and extended from D19 north to D3/PR-6 and from D9 west to PR-5. Low concentrations of BTEX compounds were also detected northwest of this plume in P1. The areas of contamination were approximately 5,300 ft^2, and 140 ft^2, as indicated in Table 5. Of the 16 wells sampled in December 2001, four wells (D4, D7, D9, and D12) exceeded the IWQS for benzene. Within the plume, there was one well (D9) at which the benzene concentration exceeded 500 µg/L. The concentrations of benzene in MW60, MW61, P2, P4, D3/PR-6, and D6, which are located downgradient of the groundwater plume, were below the IWQS.

Groundwater elevations were measured in the monitoring wells on December 1, 2001, to determine the groundwater flow direction. A list of the wells and corresponding water-level elevations is presented in Table 4. The potentiometric surface map generated from the water-level measurements is presented in Figure 9. In December 2001, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.011 foot/foot, and the average groundwater elevation was 11.40 feet AMSL.

Depth to free product and free product thickness are presented in Table 4. In December 2001, free product exceeding 1/8 inch (i.e., >0.01 foot) was not observed in any of the product delineation points. Free product recovery in December 2001 consisted of operation of the enhanced product removal system. Neither the oxygen injection locations nor the monitoring locations were changed for the next sampling event in February 2002.

3.4.19 Nineteenth Sampling Event – February 2002

The oxygen injection system had been in operation for 32 months (i.e., 2.6 years) when the nineteenth sampling event was conducted. The locations of the oxygen injectors in operation had last been modified in November 2001, as shown in Figure 10. The row of oxygen injectors (J9 through J13) on the leading edge of the plume was in operation, and the oxygen injectors (J16 through J20, J25 and J27) located within the groundwater plume were in operation. The monitoring locations to determine the effectiveness of the pilot study were MW60, MW61, MW63, P1, P2, P4, D3, D4, D6, D7, D9, D10, D12, D14, D17, and D19.

Sixteen monitoring locations were sampled for BTEX on February 19 and 20, 2002. Analytical results for groundwater sampling are summarized in Table 3 and presented in Figure 10. The laboratory results of the February 2002 sampling event are provided in Appendix V and summarized below.

- Benzene was detected in 13 of 16 samples at concentrations ranging from 0.51J µg/L to 924 µg/L. Three of the concentrations exceeded the IWQS of 71.28 µg/L and the benzene ACL of 78 µg/L.

- Toluene was detected in 11 of 16 samples at concentrations ranging from 0.17J µg/L to 26.8 µg/L. None of the concentrations exceeded the toluene IWQS of 200,000 µg/L.

- Ethylbenzene was detected in 11 of 16 samples at concentrations ranging from 0.37J μg/L to 791 μg/L. None of the concentrations exceeded the ethylbenzene IWQS of 28,718 μg/L.

- Total xylenes were detected in 11 of 16 samples at concentrations ranging from 0.60J μg/L to 2,560 μg/L. A Georgia IWQS for xylenes does not exist, but none of the concentrations exceeded the MCL of 10,000 μg/L.

As shown in Figure 10, the area of groundwater contamination continued to be roughly circular in shape and extended from D19 north to D3/PR-6 and from D9 west to PR-5. The area of contamination was approximately 4,650 ft^2, as indicated in Table 5. Of the 16 wells sampled in February 2002, three wells (D6, D7, and D9) exceeded the IWQS for benzene, as in the previous sampling event. Within the plume, there was one well (D9) at which the benzene concentration exceeded 500 μg/L. The concentrations of benzene in MW60, MW61, P2, P4, D4, and D3/PR-6, which are located downgradient of the groundwater plume, were below the IWQS.

Groundwater elevations were measured in the monitoring wells on February 19, 2002, to determine the groundwater flow direction. A list of the wells and corresponding water-level elevations is presented in Table 4. The potentiometric surface map generated from the water-level measurements is presented in Figure 11. In February 2002, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.011 foot/foot, and the average groundwater elevation was 11.47 feet AMSL.

Depth to free product and free product thickness are presented in Table 4. In February 2002, free product exceeding 1/8 inch (i.e., >0.01 foot) was not observed in any of the product delineation points. Free product recovery in February 2002 consisted of operation of the enhanced product removal system.

In March 2002, the blower was repaired. There was a problem with the air compressor in the Matrix trailer, and that system was restarted. Neither the oxygen injection locations nor the monitoring locations were changed for the next sampling event in April 2002.

3.4.20 Twentieth Sampling Event – April 2002

The oxygen injection system had been in operation for 34 months (i.e., 2.8 years) when the twentieth sampling event was conducted. The locations of the oxygen injectors in operation had last been modified in November 2001, as shown in Figure 12. The row of oxygen injectors (J9 through J13) on the leading edge of the plume was in operation, and the oxygen injectors (J16 through J20, J25 and J27) located within the groundwater plume were in operation. The monitoring locations to determine the effectiveness of the pilot study were MW60, MW61, MW63, P1, P2, P4, D3, D4, D6, D7, D9, D10, D12, D14, D17, and D19.

Sixteen monitoring locations were sampled for BTEX on April 9, 2002. Analytical results for groundwater sampling are summarized in Table 3 and presented in Figure 10. The laboratory results of the April 2002 sampling event are provided in Appendix V and summarized below.

- Benzene was detected in 13 of 16 samples at concentrations ranging from 0.31J μg/L to 817 μg/L. Two of the concentrations exceeded the IWQS of 71.28 μg/L and the benzene ACL of 78 μg/L.

- Toluene was detected in one of 16 samples at a concentration of 23.6 μg/L. This concentration did not exceed the toluene IWQS of 200,000 μg/L.

- Ethylbenzene was detected in 13 of 16 samples at concentrations ranging from 0.48J μg/L to 692 μg/L. None of the concentrations exceeded the ethylbenzene IWQS of 28,718 μg/L.

- Total xylenes were detected in 13 of 16 samples at concentrations ranging from 1.6J µg/L to 1,850 µg/L. A Georgia IWQS for xylenes does not exist, but none of the concentrations exceeded the MCL of 10,000 µg/L.

As shown in Figure 12, the area of groundwater contamination was oval in shape and extended from D19 north to D3/PR-6 and from D9 west to PR-2. The area of contamination was approximately 3,440 ft^2, as indicated in Table 5. Of the 16 wells sampled in April 2002, two wells (D7 and D9) exceeded the IWQS for benzene, as compared to three during the previous sampling event. Within the plume, there was one well (D9) at which the benzene concentration exceeded 500 µg/L. The concentrations of benzene in MW60, MW61, P2, P4, D3/PR-6, D4, and D6, which are located downgradient of the groundwater plume, were below the IWQS.

Groundwater elevations were measured in the monitoring wells on April 9, 2002, to determine the groundwater flow direction. A list of the wells and corresponding water-level elevations is presented in Table 4. The potentiometric surface map generated from the water-level measurements is presented in Figure 13. In April 2002, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.012 foot/foot, and the average groundwater elevation was 11.66 feet AMSL.

Depth to free product and free product thickness are presented in Table 4. In April 2002, free product exceeding 1/8 inch (i.e., >0.01 foot) was not observed in any of the product delineation points. Free product recovery in April 2002 consisted of operation of the enhanced product removal system.

In April 2002, an air conditioning unit was installed in the Matrix trailer. In May 2002, the oil, oil filters and air filters were changed on the compressor, and the air filters were changed on the oxygen generator in the Matrix trailer. The system would not restart due to a problem with the "ronk add-a-phase" three-phase converter. It was determined that instead of fixing the three-phase converter, the system would be rewired. Neither the oxygen injection locations nor the monitoring locations were changed for the next sampling event in June 2001.

3.4.21 Twenty-First Sampling Event – June 2002

The oxygen injection system had been in operation for 36 months (i.e., 3.0 years) when the twenty-first sampling event was conducted. The locations of the oxygen injectors in operation had last been modified in November 2001, as shown in Figure 14. The row of oxygen injectors (J9 through J13) on the leading edge of the plume was in operation, and the oxygen injectors (J16 through J20, J25 and J27) located within the groundwater plume were in operation. The monitoring locations to determine the effectiveness of the pilot study were MW60, MW61, MW63, P1, P2, P4, D3, D4, D6, D7, D9, D10, D12, D14, D17, and D19.

Sixteen monitoring locations were sampled for BTEX on June 7, 8, and 9, 2002. Analytical results for groundwater sampling are summarized in Table 3 and presented in Figure 12. The laboratory results of the June 2002 sampling event are provided in Appendix V and summarized below.

- Benzene was detected in 11 of 16 samples at concentrations ranging from 0.35J µg/L to 574 µg/L. Two of the concentrations exceeded the IWQS of 71.28 µg/L and the benzene ACL of 78 µg/L.

- Toluene was detected in five of 16 samples at a concentrations ranging from 1.1J µg/L to 15.7J µg/L. None of the concentrations exceeded the toluene IWQS of 200,000 µg/L.

- Ethylbenzene was detected in nine of 16 samples at concentrations ranging from 1.1J μg/L to 506 μg/L. None of the concentrations exceeded the ethylbenzene IWQS of 28,718 μg/L.

- Total xylenes were detected in nine of 16 samples at concentrations ranging from 0.70J μg/L to 1,690 μg/L. A Georgia IWQS for xylenes does not exist, but none of the concentrations exceeded the MCL of 10,000 μg/L.

As shown in Figure 14, the area of groundwater contamination was oblong in shape and extended from D9 west to PR-5. Contamination was also detected south of this plume in D19. The areas of contamination were approximately 2,930 ft^2 and 90 ft^2 around D19, as indicated in Table 5. Of the 16 wells sampled in April 2002, two wells (D6 and D9) exceeded the IWQS for benzene, as during the previous sampling event. Within the plume, there was one well (D9) at which the benzene concentration exceeded 500 μg/L. The concentrations of benzene in MW60, MW61, P2, P4, and D3/PR-6, which are located downgradient of the groundwater plume, were below the IWQS.

Groundwater elevations were measured in the monitoring wells on June 7, 2002, to determine the groundwater flow direction. A list of the wells and corresponding water-level elevations is presented in Table 4. The potentiometric surface map generated from the water-level measurements is presented in Figure 15. In June 2002, the groundwater flow direction was toward the northwest, the groundwater gradient was approximately 0.011 foot/foot, and the average groundwater elevation was 11.21 feet AMSL.

Depth to free product and free product thickness are presented in Table 4. In June 2002, free product exceeding 1/8 inch (i.e., >0.01 foot) was not observed in any of the product delineation points. Free product recovery in April 2002 consisted of operation of the enhanced product removal system. Neither the oxygen injection locations nor the monitoring locations were changed for the next sampling event in August 2002.

In July 2002, ProLectric rewired the Matrix system to bypass the three-phase converter. The Matrix system was restarted on July 11, 2002. It was determined in June 2002 that the lifespan of the blower associated with the vacuum extraction system had been exceeded. As a result, a new blower was installed on July 11, 2002, at which time all systems were completely operational.

4.0 ANALYSIS OF TRENDS

4.1 AREAS OF PLUME AND FREE PRODUCT

During the first year of oxygen injection (i.e., May 1999 through May 2000), the area of benzene contamination in groundwater decreased from 22,700 ft^2 in May 1999 to 8,815 ft^2 in May 2000. During the first year of remediation, the area of the dissolved benzene plume was reduced by 61 percent. The area of the plume is highly dependent on the wells that have continually been added to the monitoring program to better track the progress of the remediation.

The area of benzene contamination in groundwater continued to decrease in size during the second year of operation. The area of the dissolved benzene plume was 7,800 ft^2 in July 2000 and 5,350 ft^2 in June 2001, representing a reduction of 31 percent. The total decrease in the plume area has been 76 percent since the initiation of the corrective action.

As shown in the groundwater quality maps, the area of benzene contamination in groundwater has continued to decrease in size during the third year of operation. The area of the dissolved benzene plume was 5,350 ft^2 in June 2001 and 3,020 ft^2 in June 2002, representing a reduction of 44 percent. The total decrease in the plume area has been 87 percent since the initiation of the corrective action.

During the pilot study activities in 1999, the area of free product ranged in size from approximately 1,850 ft^2 to 2,875 ft^2, with limited recovery of free product. The area of free product did not show a significant decrease in area until additional free product recovery measures were implemented in February 2000. As a result of the enhanced product recovery system, consisting of vacuum extraction and air injection systems installed in February 2000, no measurable free product has been observed at the site since April 2001.

4.2 BENZENE CONCENTRATIONS IN GROUNDWATER

During the first year of oxygen injection, the west side, or downgradient edge, of the dissolved groundwater plume encompassed wells P1, P3, MW11, and MW63. At the end of the second year of oxygen injection, wells D1, P2, P4, MW60, and MW61, which had been located in the middle of the plume during the first year of remediation, were located on the downgradient edge of the dissolved groundwater plume. As shown in Figure 16a, the benzene concentrations in these nine wells were well below the IWQS of 71.28 μg/L and ACL of 78 μg/L in June 2002.

During the first years of oxygen injection, wells D3, D4, D6, D7, D9, D10, D12, D14, and D17 were located within the plume. Wells D3 and D4 have been in the monitoring plan since May 1999. As the area of the plume changed, wells D6, D10, and D17 were added to the monitoring plan in March 2000, and wells D7, D9, D12, D14, and D19 were added to the monitoring plan in December 2000. As shown in Figure 16b, the benzene concentrations in wells D3, D10, and D17, which are located at the plume perimeter, have been steadily decreasing and were well below the IWQS of 71.28 μg/L and the ACL of 78 μg/L in June 2002. The benzene concentrations in wells D4, D6, D7, and D9 remained above the remedial levels through the first 2 years of oxygen injection. However, the benzene concentrations in wells D4, D6, and D7 have been reduced by 75 to 90 percent during operation of the remediation system. The benzene concentrations in D4 and D7 have also been steadily decreasing. The concentration in D4 has remained below the IWQS and the ACL since February 2002. The concentration in D7 dropped below the IWQS and the ACL in June 2002. Since wells D12 and D14 were added to the monitoring plan, the benzene concentrations had been fluctuating with no discernable trend until February 2002, at which time the benzene in D12 and D14 began to steadily decrease. As of June 2002, two wells within the plume, D6 and D9, had benzene concentrations that exceeded the ACL of 78 μg/L and the IWQS of 71.28 μg/L.

Wells MW6, P5, D19, and D21 are located on the east side, or upgradient edge, of the groundwater plume. As shown in Figure 16c, the benzene concentrations have remained below the ACL of 78 μg/L and the IWQS of 71.28 μg/L since the first sampling event after the injection of oxygen began. As a result, P5 and D21 were dropped from the monitoring program after the January 2000 sampling event in lieu of other wells located in the free product area. MW6 contained low concentrations of benzene, probably because it is between the two rows of former underground storage tanks that were located in the Northern Fuel Battery. MW6 was dropped from the monitoring plan after the September 2000 sampling event so that D19 could be added in December 2000 to monitor the upgradient edge of the groundwater plume. The benzene concentrations in D19 have decreased by 86 percent since the well was added to the monitoring plan.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The oxygen injection corrective action has produced positive results by reducing the area of the dissolved hydrocarbon plume so that it no longer impacts the underground storm drain at concentrations above the benzene IWQS. The benzene concentrations continue to decrease at the site, and the corrective action should be continued at the site until benzene concentration levels are below the ACL of 78 μg/L. At the end of the first year of oxygen injection, the site ranking score was 51,000. After 36 months of oxygen injection (i.e., in June 2002), the site ranking score was 3,500 (Appendix VI).

Three additional oxygen injectors will be installed east of D9 along with two additional monitoring points to reduce the contamination in the area around D9 and to confirm upgradient conditions.

Bimonthly (i.e., every other month) groundwater sampling of wells MW60, MW61, MW63, P1, P2, P4, D3, D4, D6, D7, D9, D10, D12, D14, D17, and D19 for BTEX should continue until the benzene ACL has been achieved. The wells sampled as part of the monitoring program might be changed based on the analytical results to better track the changes in the groundwater plume. Once the benzene ACL has been achieved, confirmatory soil and groundwater sampling will be conducted. As indicated in the CAP–Part B Addendum #1 and First Annual Pilot Study Progress Report (SAIC 2000), confirmatory soil sampling will consist of the installation of 15 soil borings, with soil samples being collected for BTEX, polynuclear aromatic hydrocarbons, and TPH.

The enhanced free product recovery system that was implemented in February 2000 appears to have removed the majority of the recoverable free product; however, pockets of free product might be tied up in the vadose zone. The combination of air injection and vacuum extraction should remain in operation in conjunction with the oxygen injection system.

The sampling scheme will be changed for the August 2002 sampling event to focus on the groundwater contamination plume and to better define the area exceeding the benzene ACL of 78 μg/L. Additional injectors might be required in the vicinity of D9 to focus cleanup activities in the areas of higher benzene concentrations within the plume.

A fourth annual progress report will be submitted to GA EPD in August 2003 and will summarize the corrective action measures and results from July 2002 to June 2003.

6.0 REFERENCES

Coughlan, Michael F., 1998. Letter to John Spears (Fort Stewart Directorate of Public Works, Environmental Branch), September 4.

Metcalf & Eddy 1997. *Final Corrective Action Plan—Part B Report for Former Building 728, EPD Facility ID: 9-025035 and 9-025049, Hunter Army Airfield, Georgia*, December.

SAIC (Science Applications International Corporation) 2000. *Corrective Action Plan—Part B Addendum #1 and First Annual Pilot Study Progress Report, Former Building 728, Facility ID $9-025049, Hunter Army Airfield, Georgia,* August.

SAIC 2001. *Second Annual Pilot Study Progress Report, Former Building 728, Facility ID $9-025049, Hunter Army Airfield, Georgia*, August.

APPENDIX I

FIGURES

THIS PAGE INTENTIONALLY LEFT BLANK.

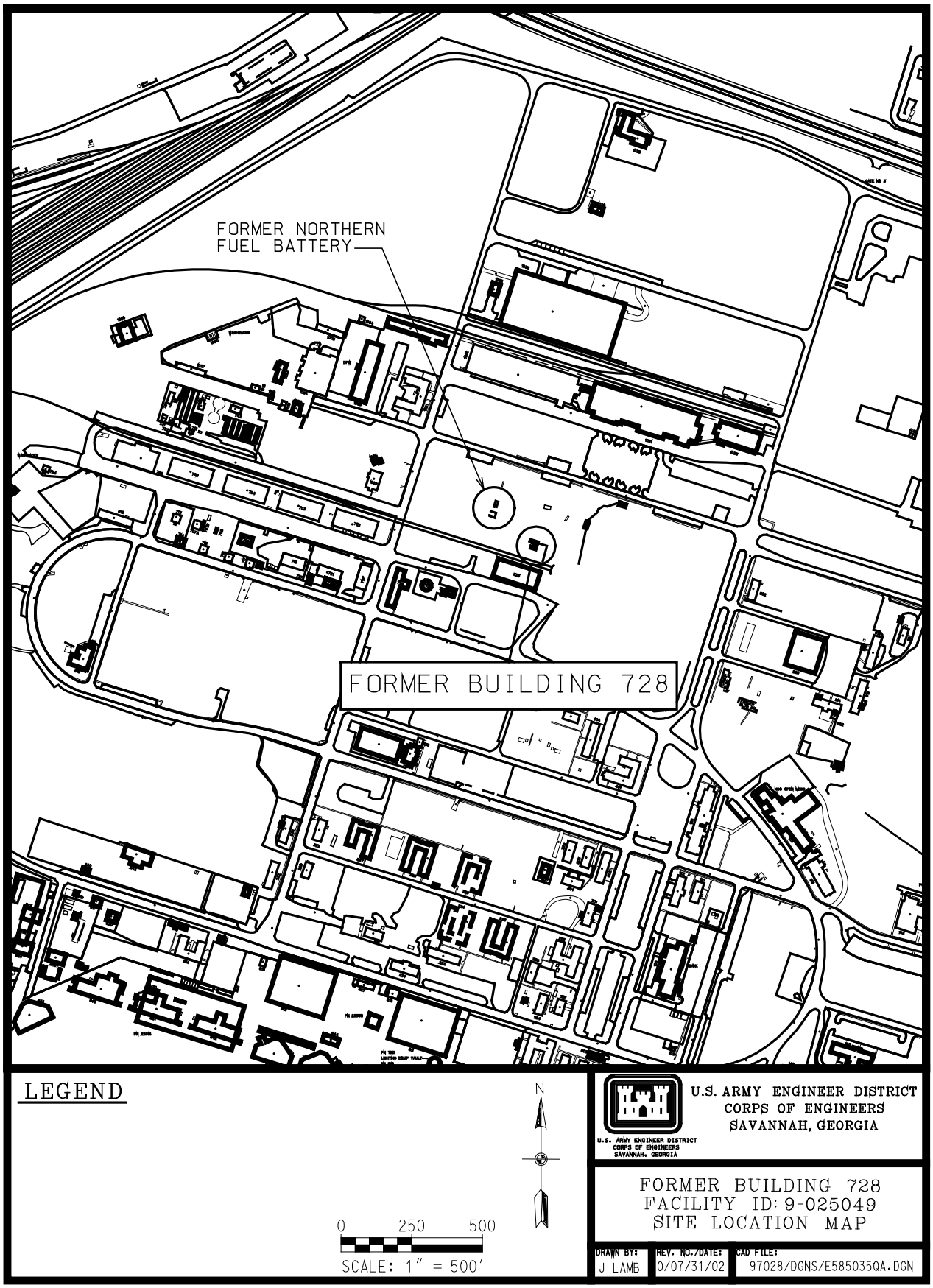
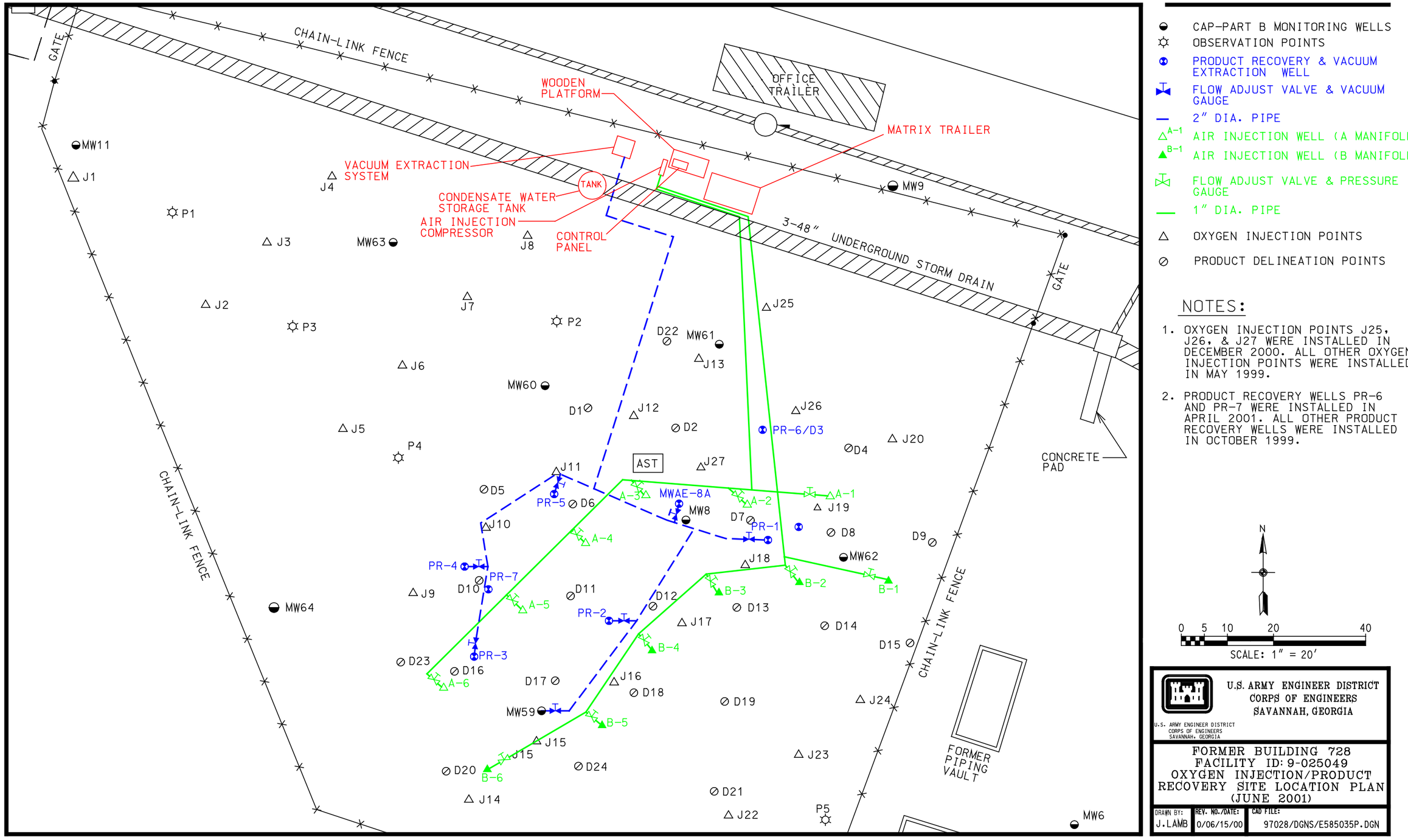


Figure 1. Location Map for the Former Building 728 Site, Facility ID #9-025049

THIS PAGE INTENTIONALLY LEFT BLANK.



- ◒ CAP-PART B MONITORING WELLS
- ☼ OBSERVATION POINTS
- PRODUCT RECOVERY & VACUUM EXTRACTION WELL
- FLOW ADJUST VALVE & VACUUM GAUGE
- 2" DIA. PIPE
- △A-1 AIR INJECTION WELL (A MANIFOLD)
- ▲B-1 AIR INJECTION WELL (B MANIFOLD)
- FLOW ADJUST VALVE & PRESSURE GAUGE
- 1" DIA. PIPE
- △ OXYGEN INJECTION POINTS
- ⊘ PRODUCT DELINEATION POINTS

NOTES:

1. OXYGEN INJECTION POINTS J25, J26, & J27 WERE INSTALLED IN DECEMBER 2000. ALL OTHER OXYGEN INJECTION POINTS WERE INSTALLED IN MAY 1999.
2. PRODUCT RECOVERY WELLS PR-6 AND PR-7 WERE INSTALLED IN APRIL 2001. ALL OTHER PRODUCT RECOVERY WELLS WERE INSTALLED IN OCTOBER 1999.

N

0 5 10 20 40

SCALE: 1" = 20'

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

FORMER BUILDING 728
FACILITY ID: 9-025049
OXYGEN INJECTION/PRODUCT RECOVERY SITE LOCATION PLAN
(JUNE 2001)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J.LAMB	0/06/15/00	97028/DGNS/E585035P.DGN

Figure 2. Site Location Map for the Former Building 728 Site, Facility ID #9-025049

THIS PAGE INTENTIONALLY LEFT BLANK.

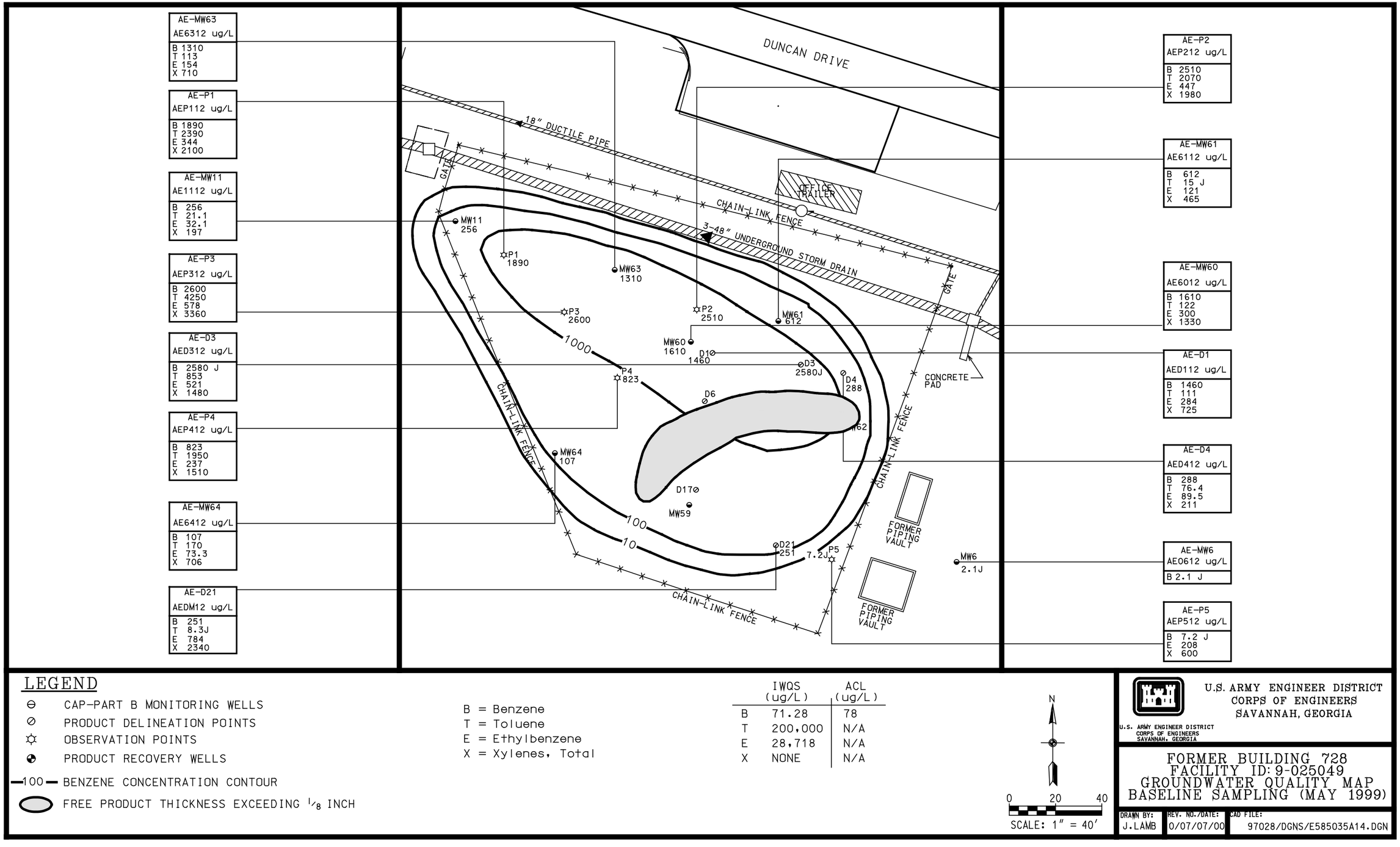
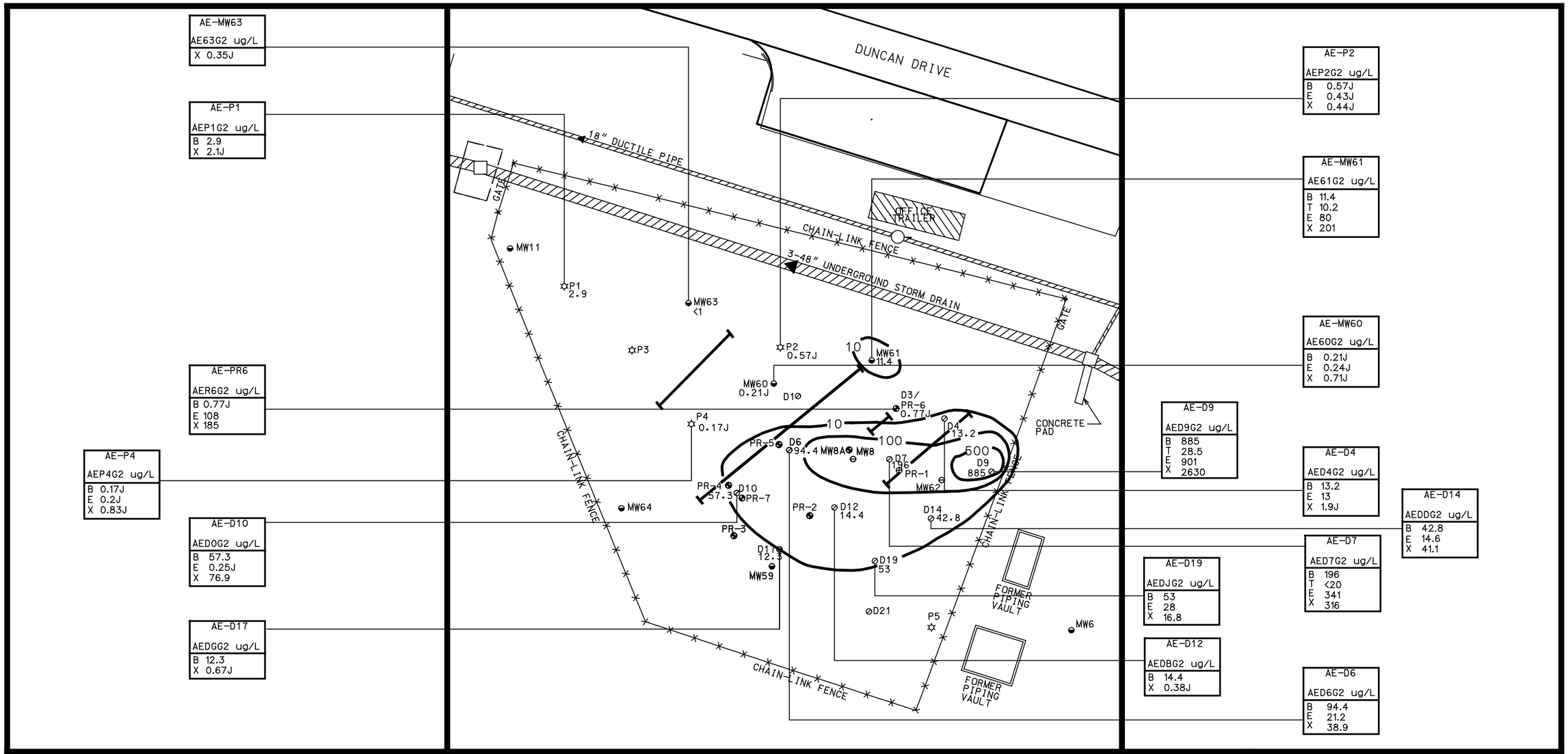


**Figure 3. Baseline Groundwater Analytical Results (May 1999)
at the Former Building 728 Site, Facility ID #9-025049**

THIS PAGE INTENTIONALLY LEFT BLANK.



LEGEND

- CAP-PART B MONITORING WELLS
- PRODUCT DELINEATION POINTS
- OBSERVATION POINTS
- PRODUCT RECOVERY WELLS
- 100 — BENZENE CONCENTRATION CONTOUR
- FREE PRODUCT THICKNESS EXCEEDING 1/8 INCH
- LINE OF OXYGEN INJECTORS IN OPERATION

B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes, Total

	IWQS (ug/L)	ACL (ug/L)
B	71.28	78
T	200,000	N/A
E	28,718	N/A
X	NONE	N/A

NOTES:
1. INJECTORS OPERATING J5,J6,J7,J9,J10,J11, J12,J13,J18,J19,J20,J27
2. PRODUCT DELINEATION POINT D3 WAS OVER DRILLED ON APRIL 17, 2001, AND REPLACED WITH PRODUCT RECOVERY WELL PR-6.

N

0 20 40

SCALE: 1" = 40'

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

FORMER BUILDING 728
FACILITY ID: 9-025049
GROUNDWATER QUALITY MAP
(AUGUST 2001)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J.LAMB	0/04/10/02	97028/DGNS/E585035A33D.DGN

Figure 4. Groundwater Analytical Results (August 2001) at the Former Building 728 Site, Facility ID #9-025049

THIS PAGE INTENTIONALLY LEFT BLANK.

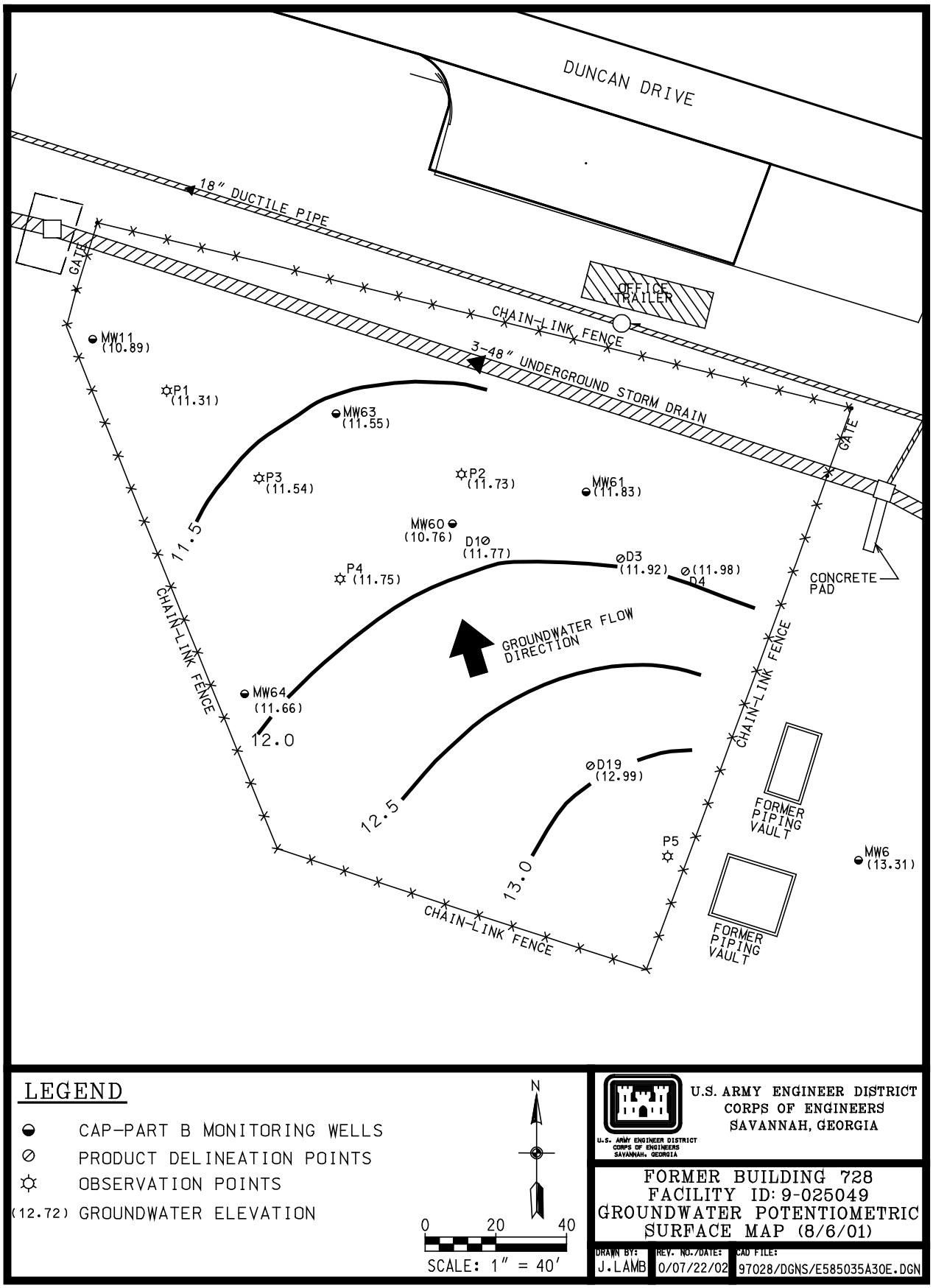
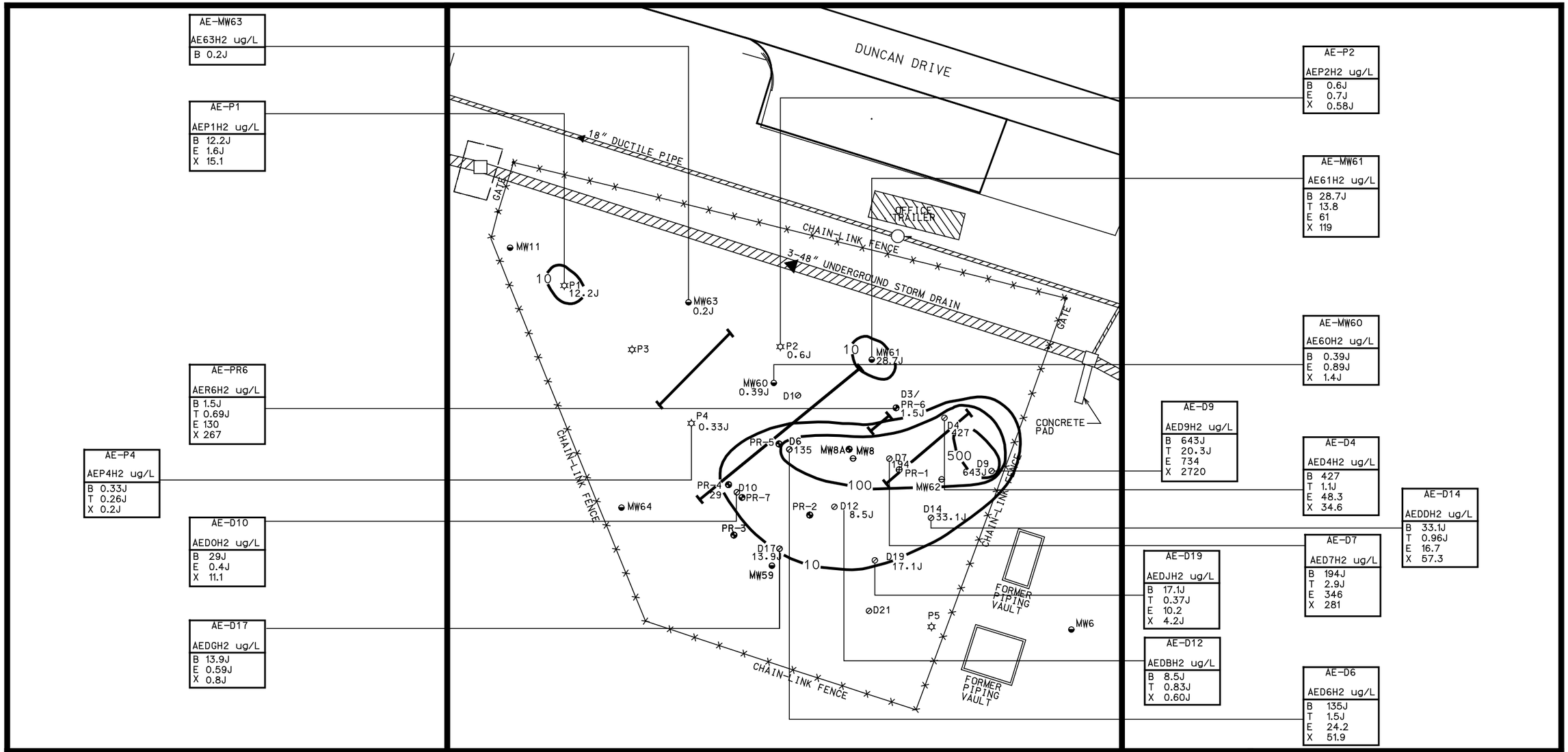


Figure 5. Groundwater Potentiometric Surface Map (August 2001) at the Former Building 728 Site, Facility ID #9-025049

THIS PAGE INTENTIONALLY LEFT BLANK.



LEGEND

- CAP-PART B MONITORING WELLS
- PRODUCT DELINEATION POINTS
- OBSERVATION POINTS
- PRODUCT RECOVERY WELLS
- 100 BENZENE CONCENTRATION CONTOUR
- FREE PRODUCT THICKNESS EXCEEDING 1/8 INCH
- LINE OF OXYGEN INJECTORS IN OPERATION

B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes, Total

	IWQS (ug/L)	ACL (ug/L)
B	71.28	78
T	200,000	N/A
E	28,718	N/A
X	NONE	N/A

NOTES:
1. INJECTORS OPERATING J5,J6,J7,J9,J10,J11, J12,J13,J18,J19,J20,J27
2. PRODUCT DELINEATION POINT D3 WAS OVER DRILLED ON APRIL 17, 2001, AND REPLACED WITH PRODUCT RECOVERY WELL PR-6.

N

0 20 40

SCALE: 1" = 40'

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

FORMER BUILDING 728
FACILITY ID: 9-025049
GROUNDWATER QUALITY MAP
(OCTOBER 2001)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J.LAMB	0/04/10/02	97028/DGNS/E585035A33E.DGN

Figure 6. Groundwater Analytical Results (October 2001) at the Former Building 728 Site, Facility ID #9-025049

THIS PAGE INTENTIONALLY LEFT BLANK.

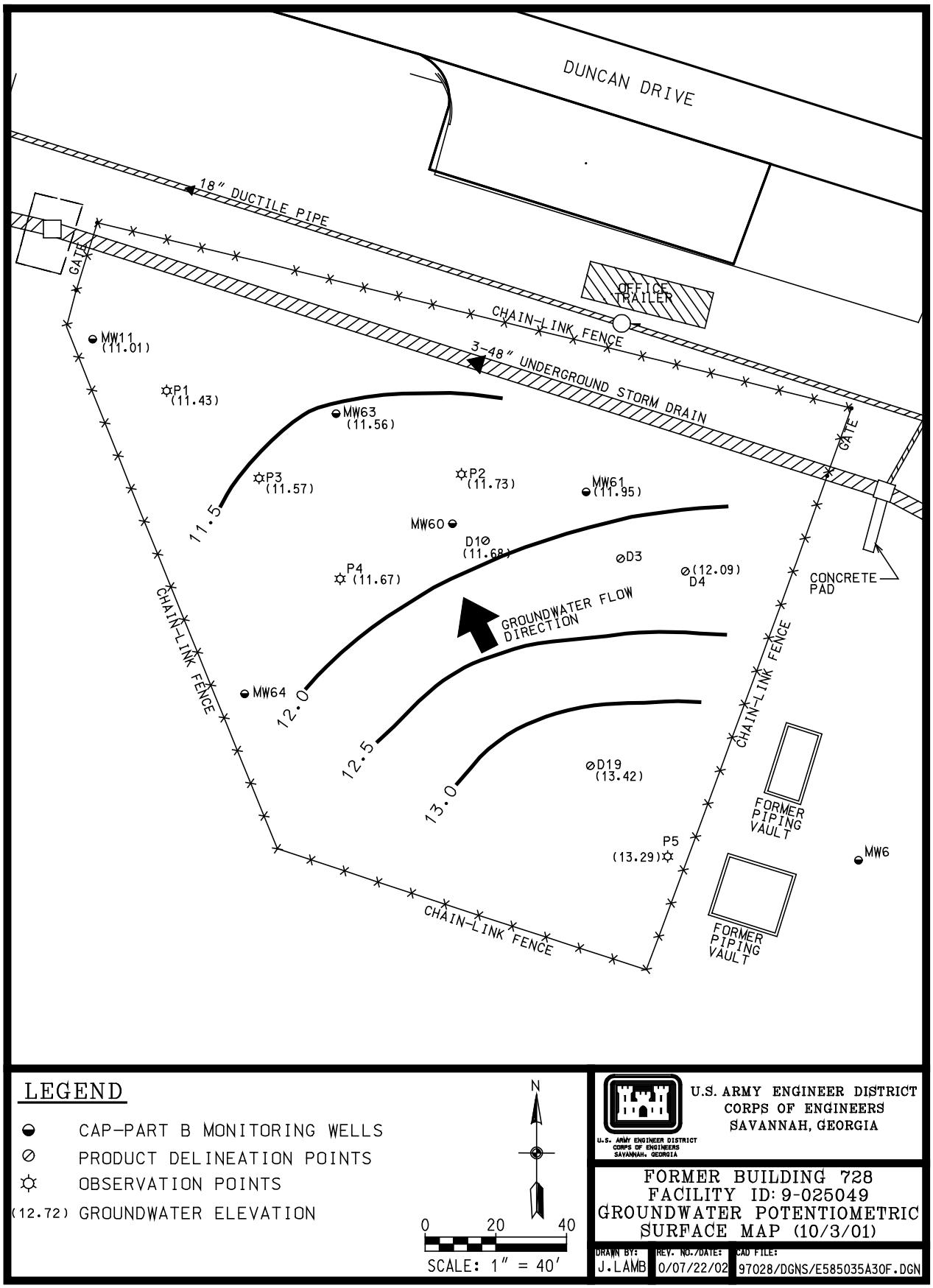
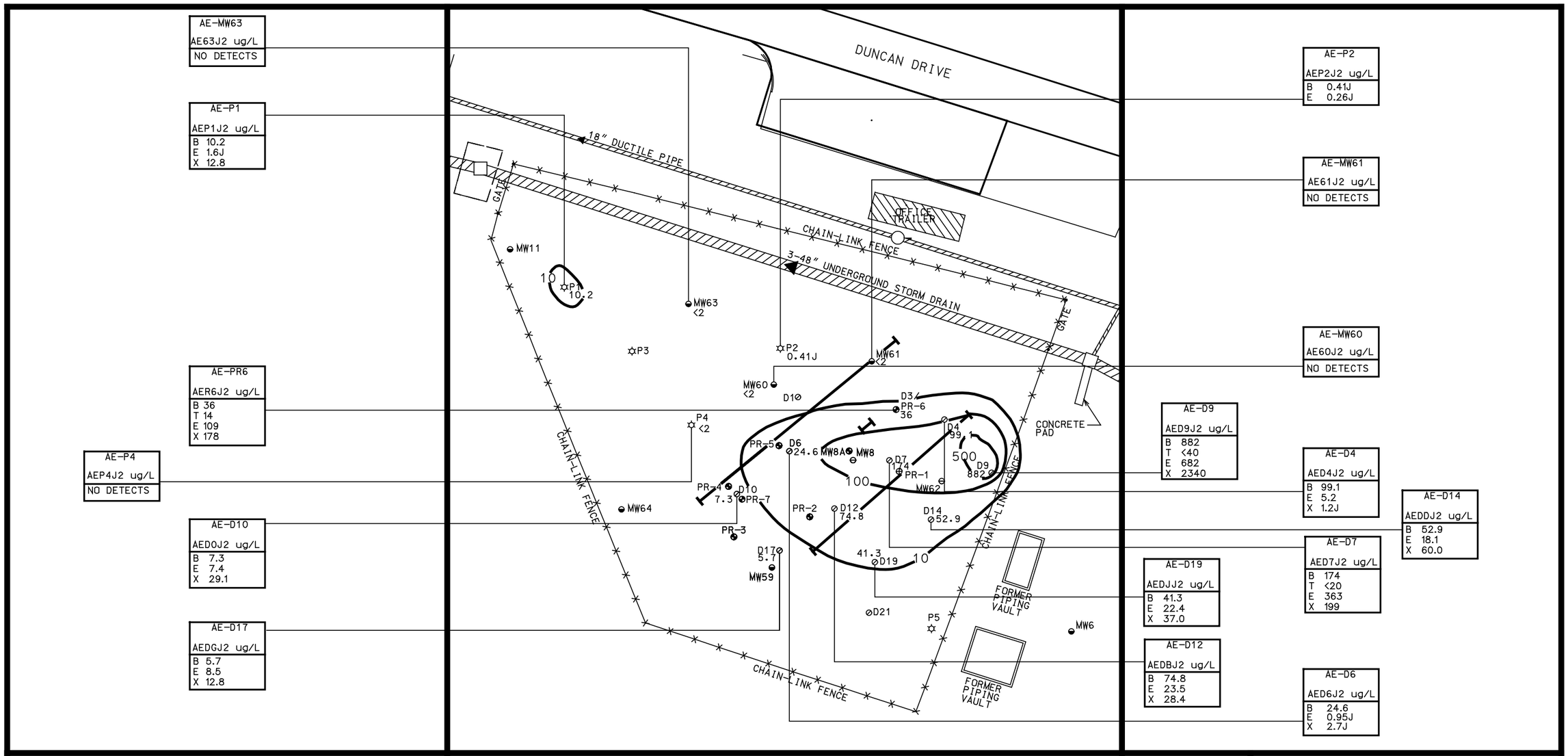


**Figure 7. Groundwater Potentiometric Surface Map (October 2001)
at the Former Building 728 Site, Facility ID #9-025049**

THIS PAGE INTENTIONALLY LEFT BLANK.



LEGEND

- CAP-PART B MONITORING WELLS
- PRODUCT DELINEATION POINTS
- OBSERVATION POINTS
- PRODUCT RECOVERY WELLS
- 100 BENZENE CONCENTRATION CONTOUR
- FREE PRODUCT THICKNESS EXCEEDING 1/8 INCH
- LINE OF OXYGEN INJECTORS IN OPERATION

B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes, Total

	IWQS (ug/L)	ACL (ug/L)
B	71.28	78
T	200,000	N/A
E	28,718	N/A
X	NONE	N/A

NOTES:
1. INJECTORS OPERATING J9,J10,J11,J12,J13 J16,J17,J18,J19,J20,J25,J27
2. PRODUCT DELINEATION POINT D3 WAS OVER DRILLED ON APRIL 17, 2001, AND REPLACED WITH PRODUCT RECOVERY WELL PR-6.

N
0 20 40
SCALE: 1" = 40'

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

FORMER BUILDING 728
FACILITY ID: 9-025049
GROUNDWATER QUALITY MAP
(DECEMBER 2001)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J.LAMB	0/04/12/02	97028/DGNS/E585035A33F.DGN

Figure 8. Groundwater Analytical Results (December 2001) at the Former Building 728 Site, Facility ID #9-025049

THIS PAGE INTENTIONALLY LEFT BLANK.

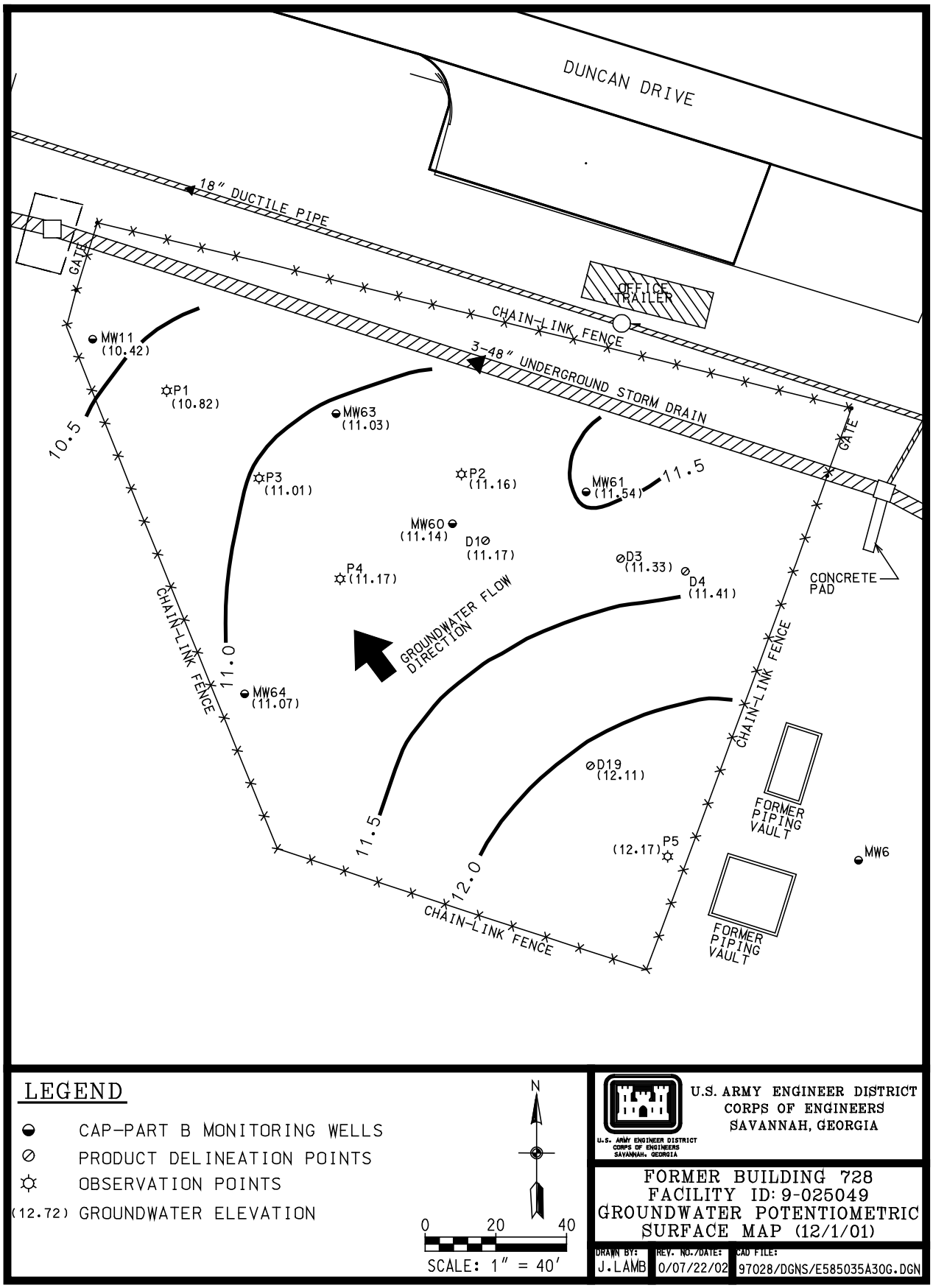
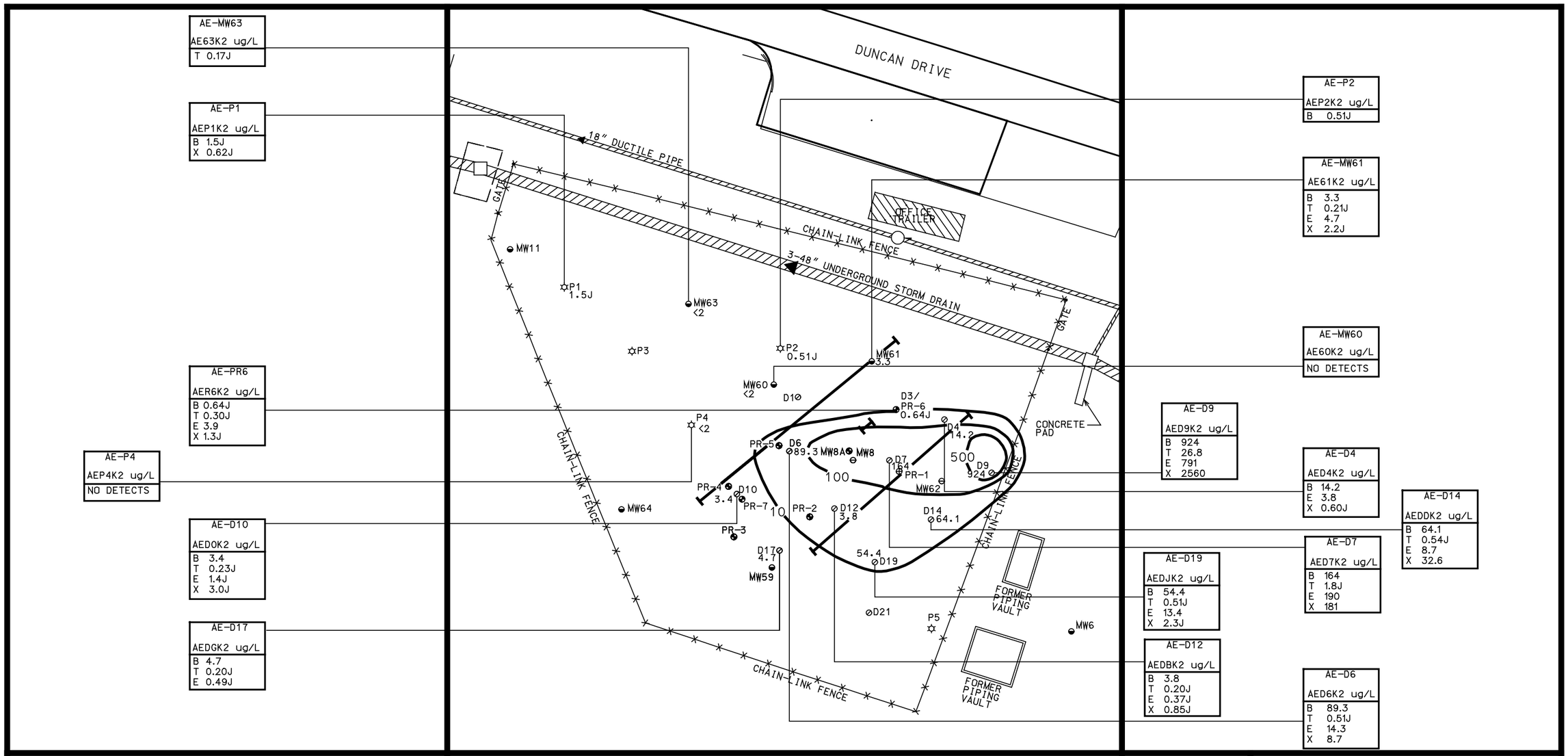


**Figure 9. Groundwater Potentiometric Surface Map (December 2001)
at the Former Building 728 Site, Facility ID #9-025049**

THIS PAGE INTENTIONALLY LEFT BLANK.



LEGEND

- CAP-PART B MONITORING WELLS
- PRODUCT DELINEATION POINTS
- OBSERVATION POINTS
- PRODUCT RECOVERY WELLS
- 100 BENZENE CONCENTRATION CONTOUR
- FREE PRODUCT THICKNESS EXCEEDING 1/8 INCH
- LINE OF OXYGEN INJECTORS IN OPERATION

B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes, Total

	IWQS (ug/L)	ACL (ug/L)
B	71.28	78
T	200,000	N/A
E	28,718	N/A
X	NONE	N/A

NOTES:
1. INJECTORS OPERATING J9,J10,J11,J12,J13 J16,J17,J18,J19,J20,J25,J27
2. PRODUCT DELINEATION POINT D3 WAS OVER DRILLED ON APRIL 17, 2001, AND REPLACED WITH PRODUCT RECOVERY WELL PR-6.

N
0 20 40
SCALE: 1" = 40'

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

FORMER BUILDING 728
FACILITY ID: 9-025049
GROUNDWATER QUALITY MAP
(FEBRUARY 2002)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J.LAMB	0/07/19/02	97028/DGNS/E585035A33G.DGN

Figure 10. Groundwater Analytical Results (February 2002) at the Former Building 728 Site, Facility ID #9-025049

THIS PAGE INTENTIONALLY LEFT BLANK.

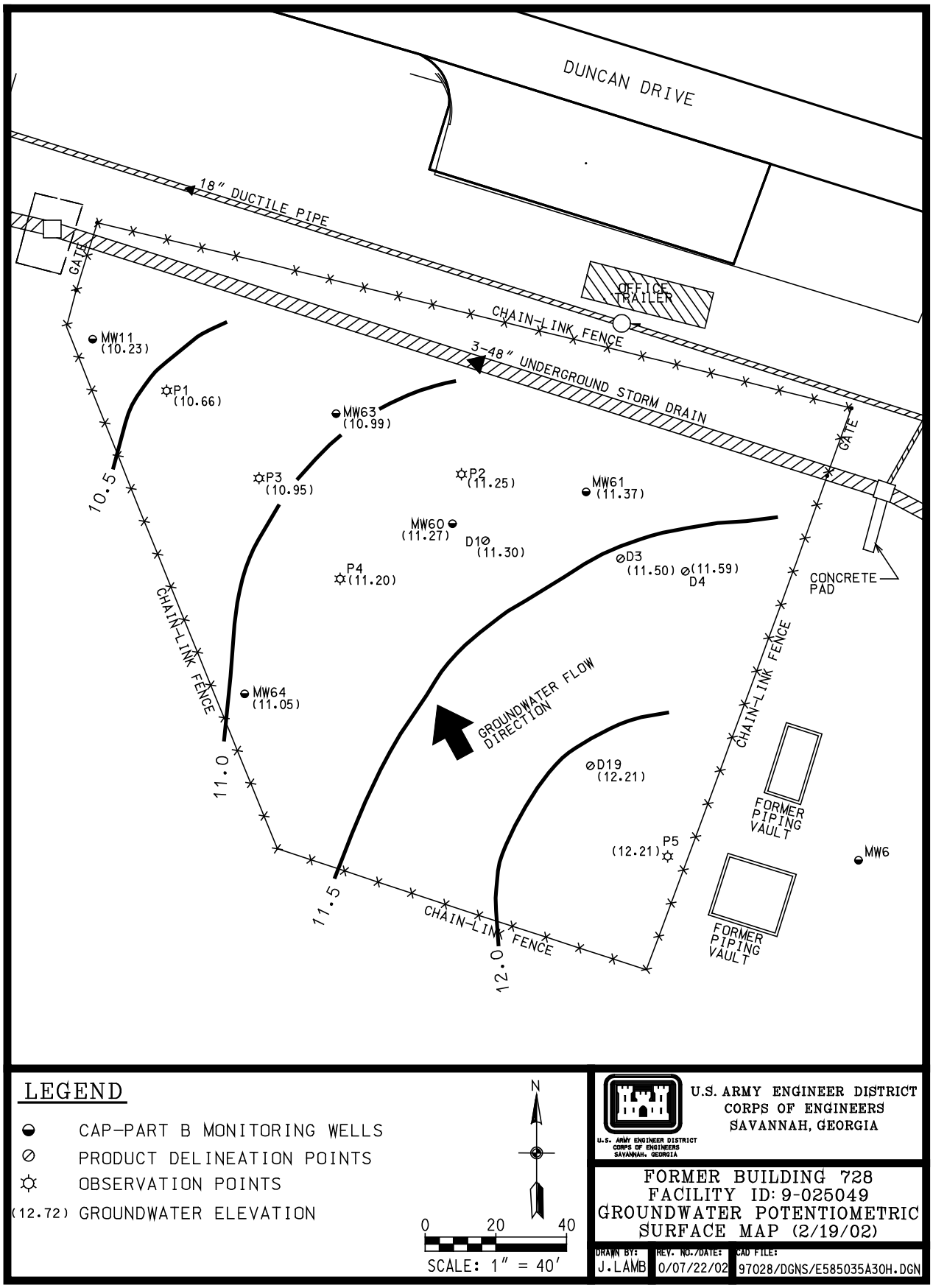
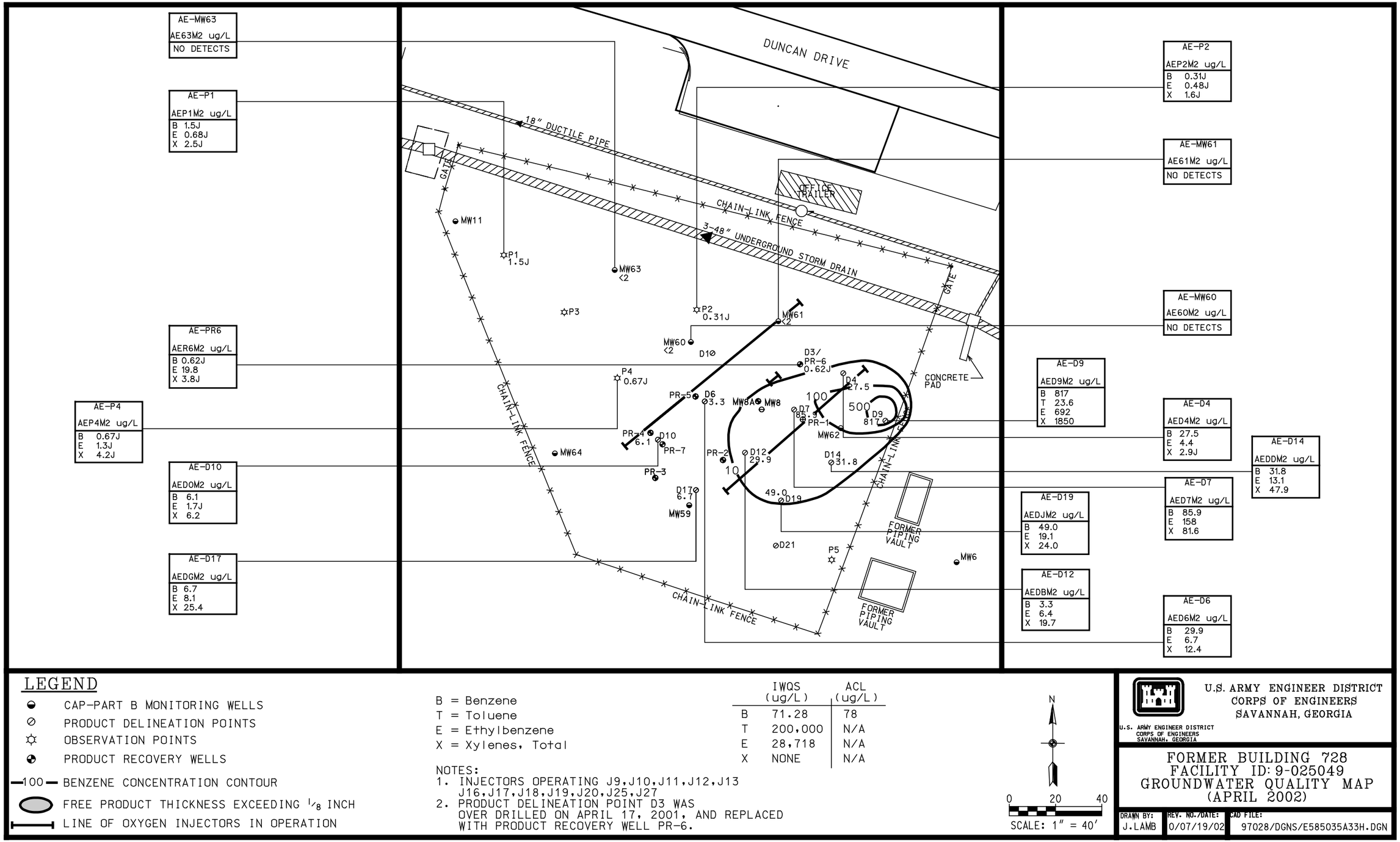


Figure 11. Groundwater Potentiometric Surface Map (February 2002) at the Former Building 728 Site, Facility ID #9-025049

THIS PAGE INTENTIONALLY LEFT BLANK.



LEGEND

- CAP-PART B MONITORING WELLS
- PRODUCT DELINEATION POINTS
- OBSERVATION POINTS
- PRODUCT RECOVERY WELLS
- 100 — BENZENE CONCENTRATION CONTOUR
- FREE PRODUCT THICKNESS EXCEEDING 1/8 INCH
- LINE OF OXYGEN INJECTORS IN OPERATION

B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes, Total

	IWQS (ug/L)	ACL (ug/L)
B	71.28	78
T	200,000	N/A
E	28,718	N/A
X	NONE	N/A

NOTES:
1. INJECTORS OPERATING J9,J10,J11,J12,J13 J16,J17,J18,J19,J20,J25,J27
2. PRODUCT DELINEATION POINT D3 WAS OVER DRILLED ON APRIL 17, 2001, AND REPLACED WITH PRODUCT RECOVERY WELL PR-6.

N

0 20 40

SCALE: 1" = 40'

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

FORMER BUILDING 728
FACILITY ID: 9-025049
GROUNDWATER QUALITY MAP
(APRIL 2002)

DRAWN BY:	REV. NO./DATE:	CAD FILE:
J.LAMB	0/07/19/02	97028/DGNS/E585035A33H.DGN

**Figure 12. Groundwater Analytical Results (April 2002)
at the Former Building 728 Site, Facility ID #9-025049**

THIS PAGE INTENTIONALLY LEFT BLANK.

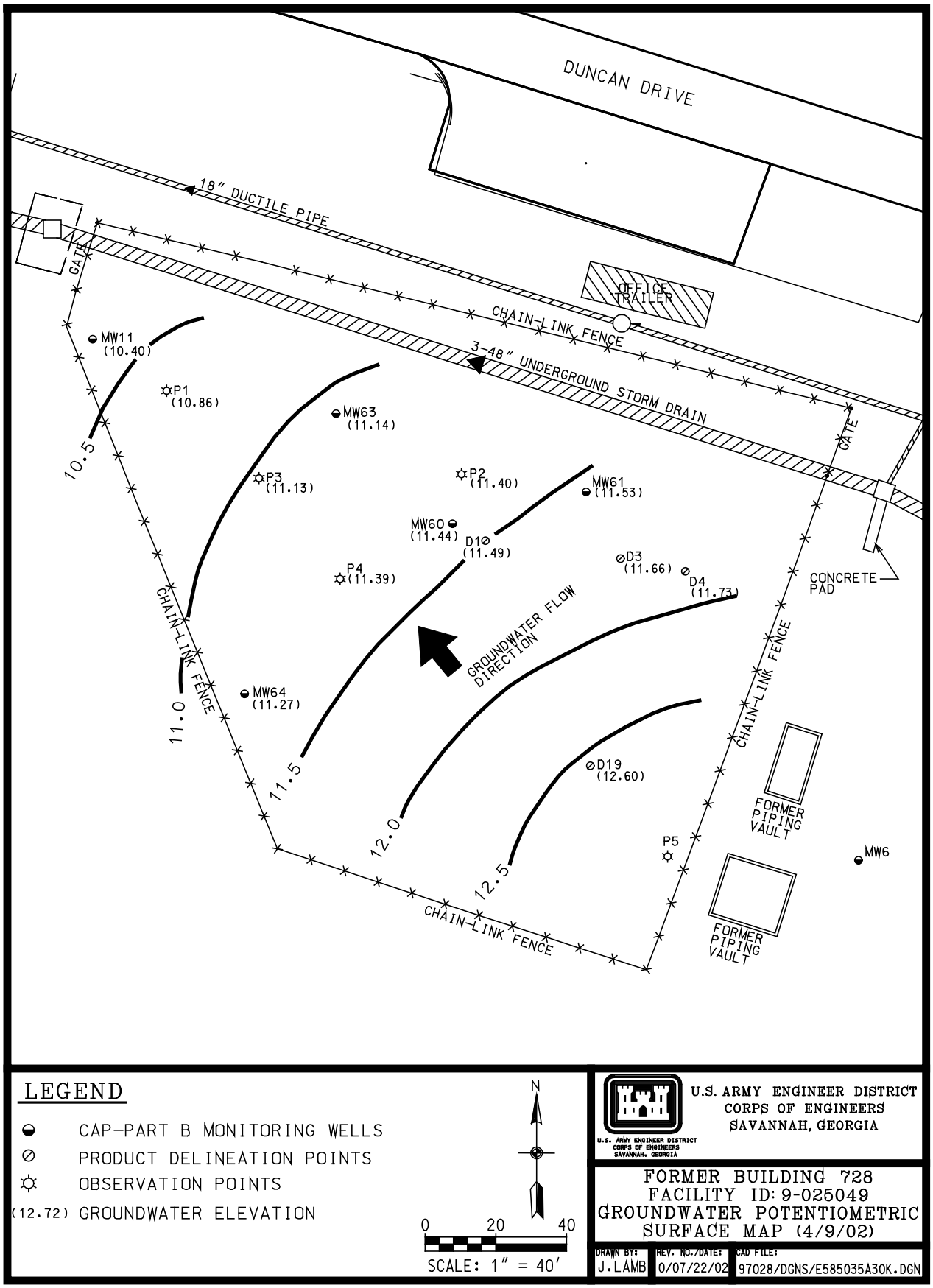


**Figure 13. Groundwater Potentiometric Surface Map (April 2002)
at the Former Building 728 Site, Facility ID #9-025049**

THIS PAGE INTENTIONALLY LEFT BLANK.

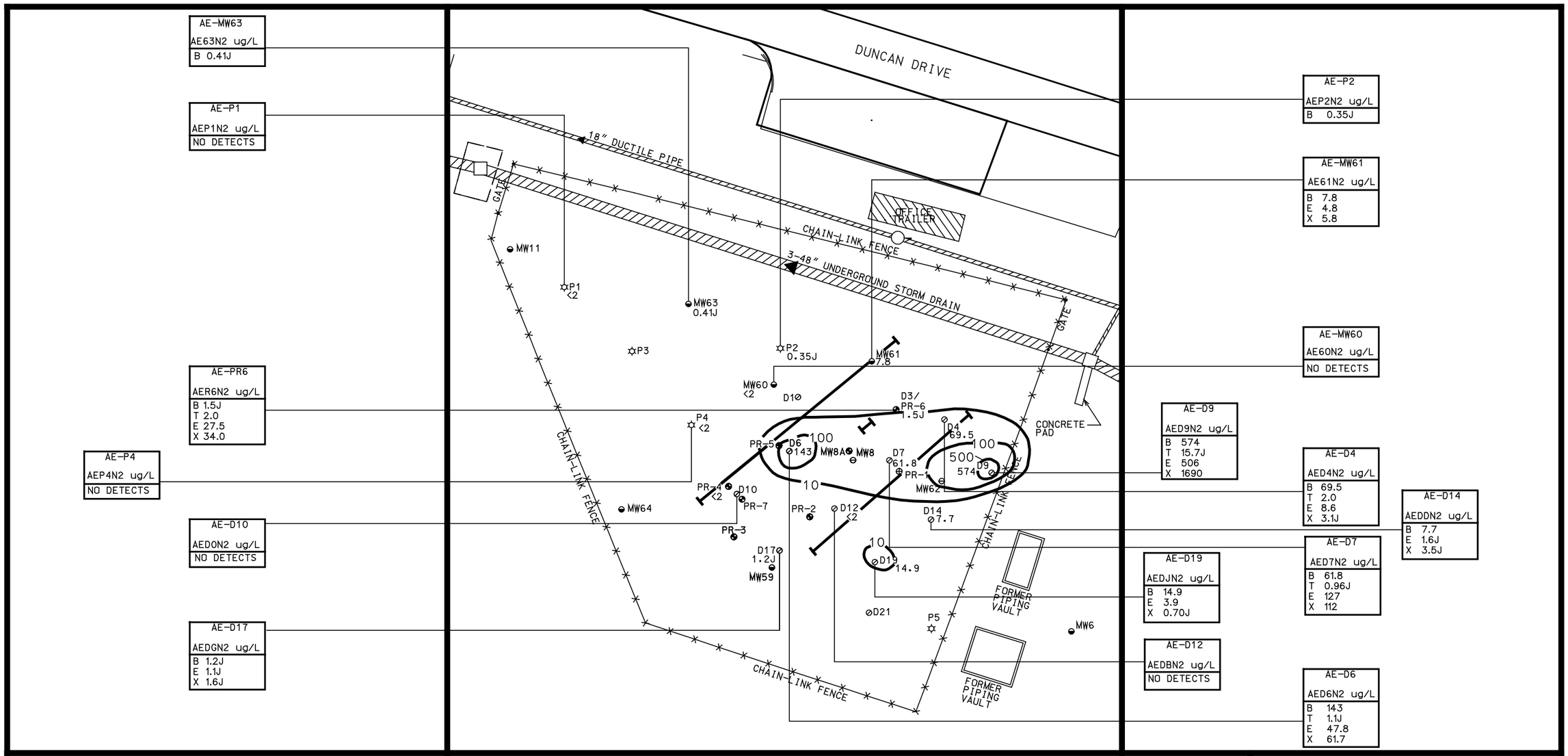


**Figure 14. Groundwater Analytical Results (June 2002)
at the Former Building 728 Site, Facility ID #9-025049**

THIS PAGE INTENTIONALLY LEFT BLANK.

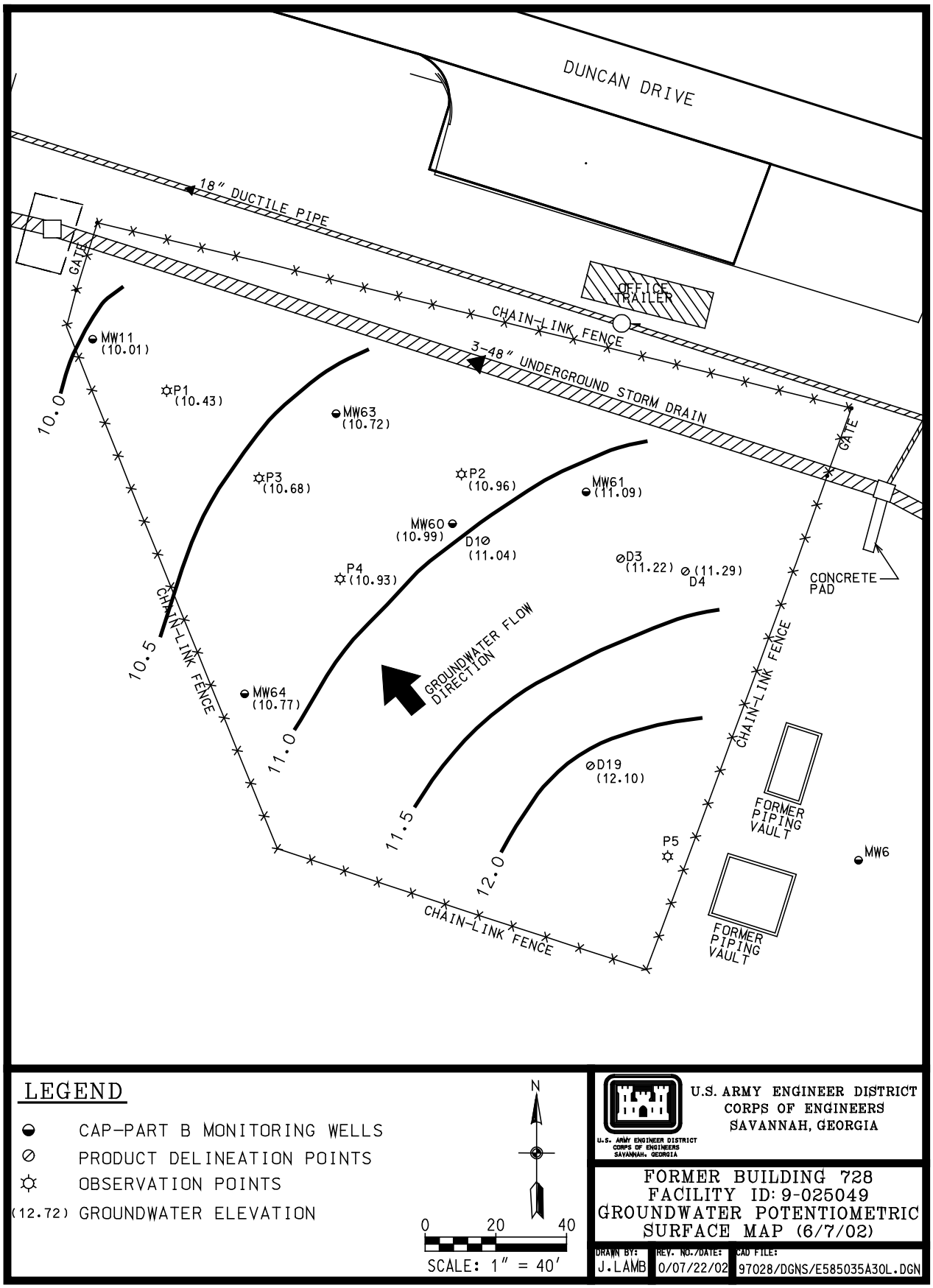


**Figure 15. Groundwater Potentiometric Surface Map (June 2002)
at the Former Building 728 Site, Facility ID #9-025049**

THIS PAGE INTENTIONALLY LEFT BLANK.

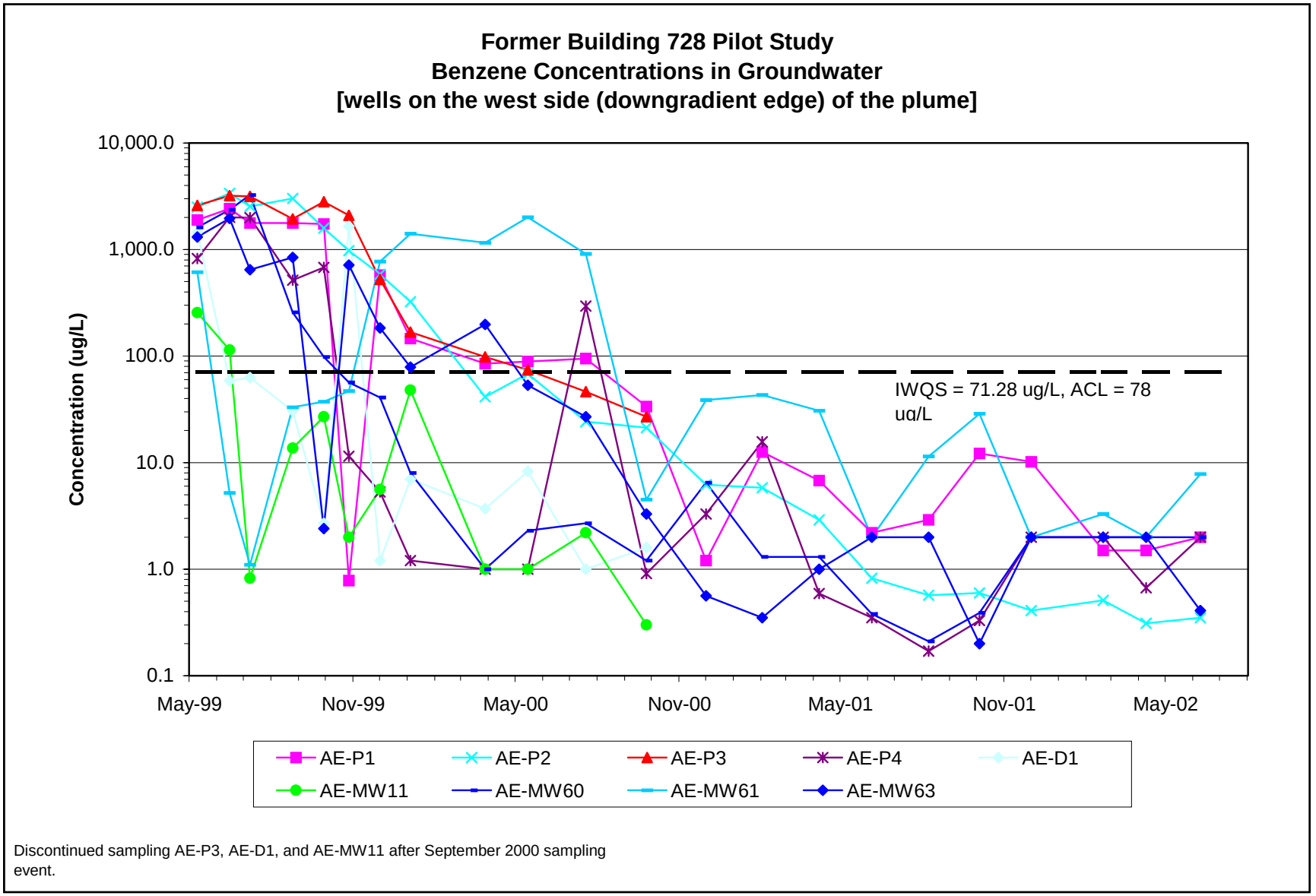


Figure 16a. Trend of Benzene Concentrations in Groundwater at the Former Building 728 Site, Facility ID #9-025049

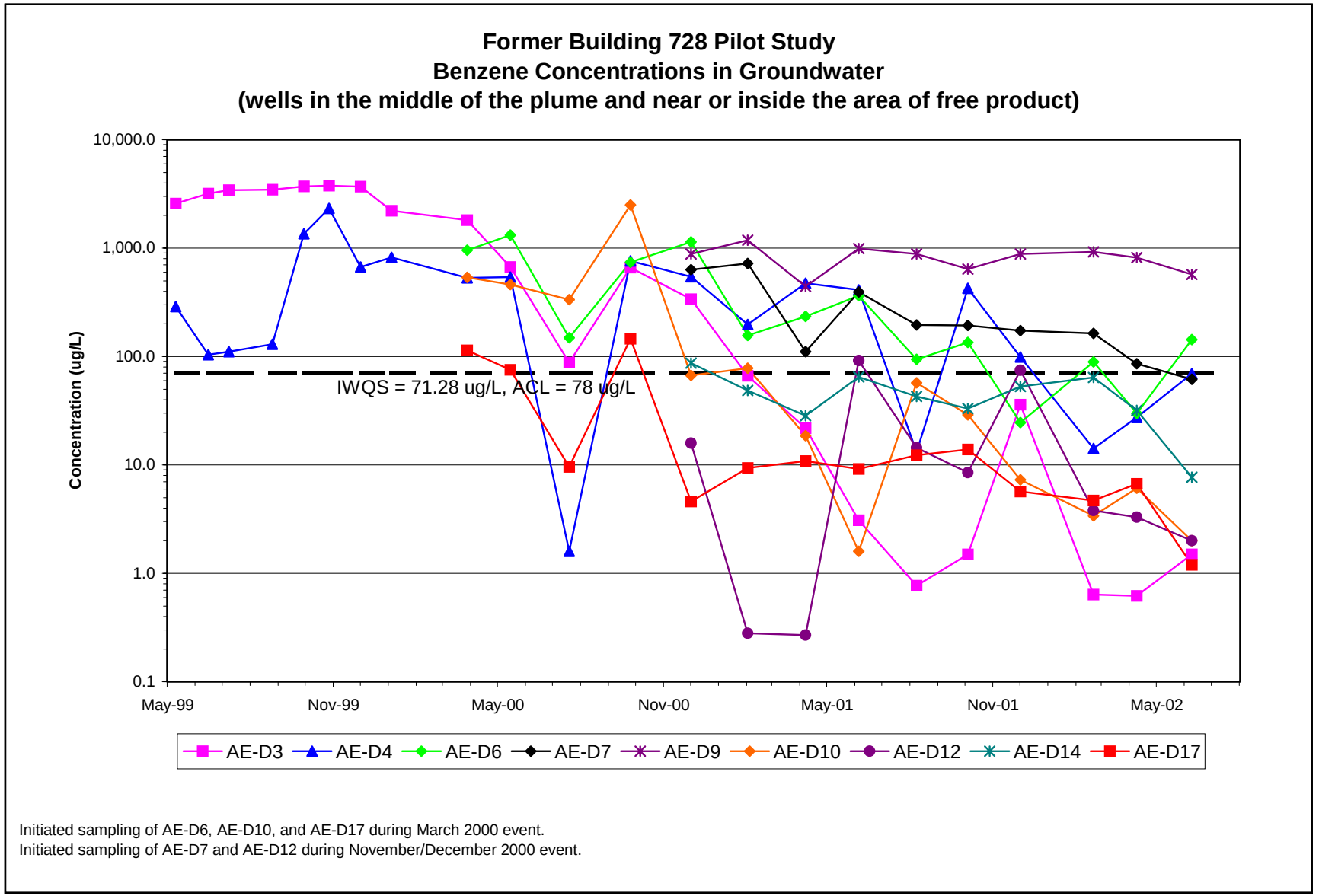


Figure 16b. Trend of Benzene Concentrations in Groundwater at the Former Building 728 Site, Facility ID #9-025049

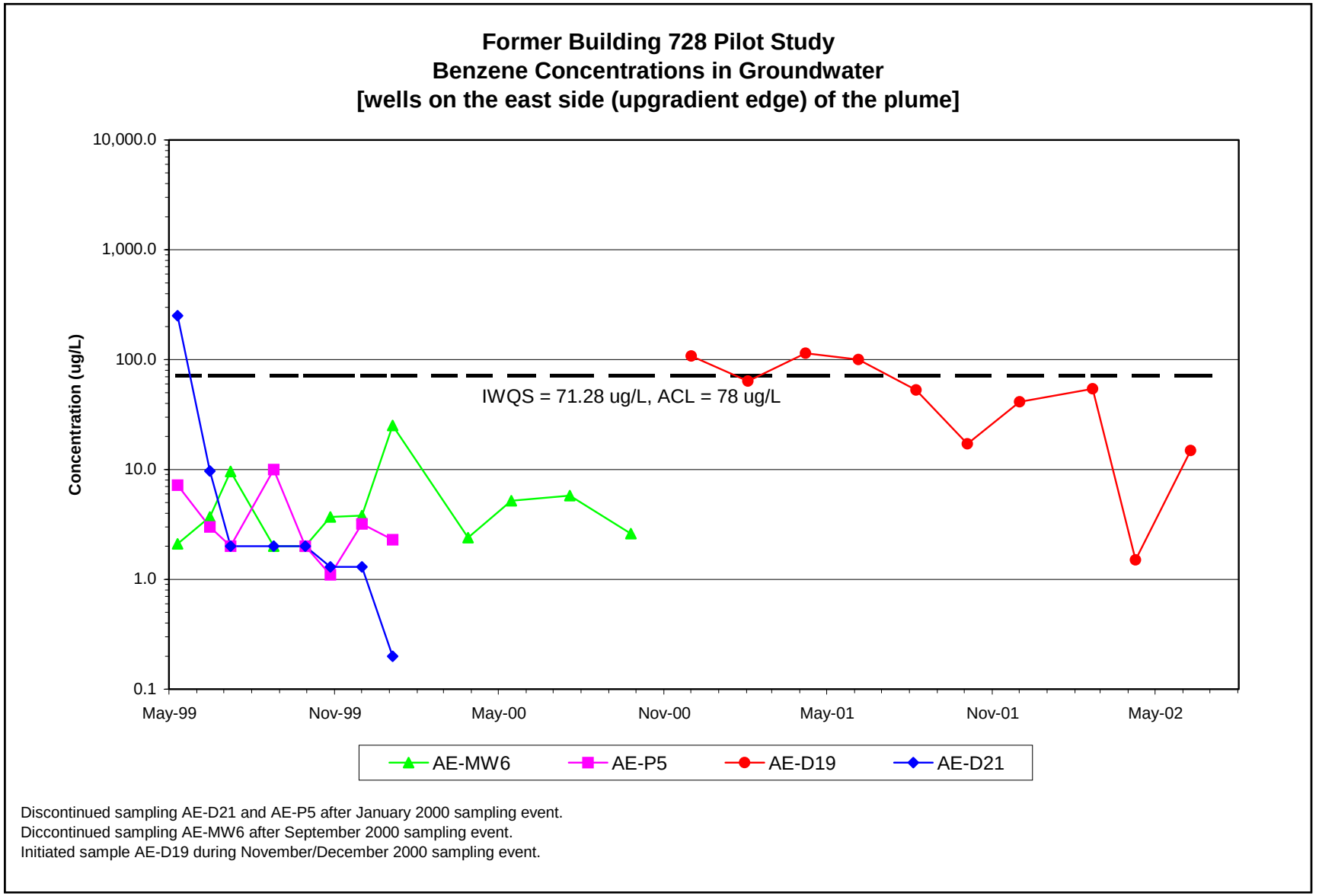


Figure 16c. Trend of Benzene Concentrations in Groundwater at the Former Building 728 Site, Facility ID #9-025049

THIS PAGE INTENTIONALLY LEFT BLANK.

APPENDIX II

TABLES

THIS PAGE INTENTIONALLY LEFT BLANK.

Table 1. Well Construction Details

Boring Number	Date Installed	Boring Depth (feet BGS)	Screened Interval (feet BGS)	Type of Completion	Coordinates (NAD 83)		Elevation (NAVD 88)	
					Northing	Easting	Ground Surface	Top of Casing
Product Delineation Points								
D1	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	740054.93	976051.27	19.7	20.07
D2	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	740050.53	976070.34	19.3	19.60
D3	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	740050.07	976089.18	19.4	19.69
D4	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	740046.22	976107.88	19.4	19.66
D5	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	740037.25	976028.69	19.5	19.88
D6	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	740034.06	976047.99	19.3	19.66
D7	05/05/99	13.0	2.0 – 12.0	3/4-inch PVC	740030.52	976086.58	19.0	19.35
D8	05/05/99	13.0	2.0 – 12.0	3/4-inch PVC	740027.93	976103.98	19.3	19.60
D9	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	740025.75	976125.99	19.7	20.02
D10	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	740017.47	976027.72	19.2	19.57
D11	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	740014.16	976047.52	19.2	19.57
D12	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	740011.86	976065.41	18.8	19.14
D13	05/05/99	12.9	2.0 – 12.0	3/4-inch PVC	740011.61	976083.60	18.7	19.02
D14	05/05/99	13.0	2.0 – 12.0	3/4-inch PVC	740007.57	976102.71	19.2	19.57
D15	05/06/99	13.0	2.0 – 12.0	3/4-inch PVC	740003.89	976121.23	20.0	20.41
D16	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	739997.75	976022.32	18.8	19.13
D17	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	739995.73	976044.19	18.9	19.22
D18	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	739993.17	976061.28	18.8	19.18
D19	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	739991.20	976080.98	18.8	19.13
D20	05/06/99	12.5	2.0 – 12.0	3/4-inch PVC	739976.07	976020.55	18.5	18.90
D21	05/06/99	13.0	2.0 – 12.0	3/4-inch PVC	739971.67	976078.73	18.8	19.23
D22	05/07/99	12.5	2.0 – 12.0	3/4-inch PVC	740069.38	976068.43	19.9	20.30
D23	05/08/99	13.0	2.5 – 12.5	3/4-inch PVC	739999.74	976010.69	18.7	19.07
D24	05/08/99	12.5	2.5 – 12.5	3/4-inch PVC	739977.16	976049.24	18.5	18.84
Oxygen Injection Points								
J1	05/04/99	15.5	14.5 – 15.5	3/4-inch PVC	740104.80	975939.61	18.8	19.34
J2	05/04/99	15.5	14.5 – 15.5	3/4-inch PVC	740077.21	975968.34	19.2	19.83
J3	05/04/99	15.5	14.5 – 15.5	3/4-inch PVC	740090.75	975981.69	19.4	20.04
J4	05/04/99	15.5	14.5 – 15.5	3/4-inch PVC	740105.14	975995.76	19.4	19.94
J5	05/05/99	15.5	14.5 – 15.5	3/4-inch PVC	740050.31	975998.13	19.5	20.04
J6	05/05/99	15.5	14.5 – 15.5	3/4-inch PVC	740064.10	976011.06	19.7	20.32
J7	05/05/99	15.5	14.5 – 15.5	3/4-inch PVC	740079.00	976025.13	19.9	20.49
J8	05/05/99	15.5	14.5 – 15.5	3/4-inch PVC	740092.29	976038.25	19.8	20.41
J9	05/05/99	15.5	14.5 – 15.5	3/4-inch PVC	740014.69	976013.41	19.0	19.55
J10	05/05/99	15.5	14.5 – 15.5	3/4-inch PVC	740028.91	976029.17	19.4	19.91
J11	05/05/99	15.5	14.5 – 15.5	3/4-inch PVC	740040.97	976044.44	19.5	20.11
J12	05/06/99	15.5	14.5 – 15.5	3/4-inch PVC	740053.18	976061.26	19.2	19.73
J13	05/06/99	15.5	14.5 – 15.5	3/4-inch PVC	740065.56	976075.42	20.0	20.49
J14	05/06/99	15.5	14.5 – 15.5	3/4-inch PVC	739969.84	976025.51	18.8	19.29
J15	05/06/99	15.5	14.5 – 15.5	3/4-inch PVC	739982.53	976040.17	18.7	19.13
J16	05/06/99	15.5	14.5 – 15.5	3/4-inch PVC	739995.29	976056.95	18.9	19.38
J17	05/06/99	15.5	14.5 – 15.5	3/4-inch PVC	740008.13	976071.76	18.8	19.32
J18	05/06/99	15.5	14.5 – 15.5	3/4-inch PVC	740020.77	976085.46	18.9	19.43
J19	05/06/99	15.5	14.0 – 15.0	3/4-inch PVC	740033.25	976101.09	19.3	19.74
J20	05/07/99	15.0	14.0 – 15.0	3/4-inch PVC	740048.06	976117.43	19.8	20.27
J21	05/07/99	13.0	11.2 – 12.2	3/4-inch PVC	739952.01	976066.51	18.7	19.18
J22	05/07/99	13.0	11.5 – 12.5	3/4-inch PVC	739966.45	976081.80	18.9	19.37
J23	05/07/99	14.0	12.5 – 13.5	3/4-inch PVC	739979.58	976097.09	19.2	19.64
J24	05/07/99	15.0	14.0 – 15.0	3/4-inch PVC	739991.47	976110.47	19.5	19.99
J25	12/04/00	15.0	13.9 – 14.9	3/4-inch PVC	740076.54	976090.02	—	—

NOTES:
BGS Below ground surface
PVC Polyvinyl chloride

Table 1. Well Construction Details (continued)

Boring Number	Date Installed	Boring Depth (feet BGS)	Screened Interval (feet BGS)	Type of Completion	Coordinates (NAD 83)		Elevation (NAVD 88)	
					Northing	Easting	Ground Surface	Top of Casing
J26	12/04/00	15.0	13.9 – 14.9	3/4-inch PVC	740054.12	976096.40	—	—
J27	12/04/00	15.0	13.9 – 14.9	3/4-inch PVC	740041.89	976075.82	—	—
Observation Points								
P1	05/06/99	12.6	2.5 – 12.5	3/4-inch PVC	740097.33	975961.13	19.0	19.42
P2	05/07/99	12.6	2.5 – 12.5	3/4-inch PVC	740073.70	976044.53	20.0	20.34
P3	05/07/99	12.6	2.5 – 12.5	3/4-inch PVC	740072.60	975987.25	19.5	19.91
P4	05/07/99	12.5	2.0 – 12.0	3/4-inch PVC	740044.16	976010.15	19.4	19.79
P5	05/08/99	13.0	2.5 – 12.5	3/4-inch PVC	739965.59	976102.85	19.5	19.84
Vapor Test Points								
V1	05/06/99	12.3	2.2 – 12.2	3/4-inch PVC	739822.95	976270.18	19.3	19.54
V2	05/07/99	12.2	2.1 – 12.1	3/4-inch PVC	739806.61	976282.91	19.3	19.20
VW-1	05/09/99	12.3	11.8 – 11.8	3/4-inch PVC	739818.57	976268.30	19.4	19.29
VEW-1	05/17/99	6.0	2.0 – 6.0	3/4-inch PVC	739816.06	976264.79	19.4	19.60
P-1	05/17/99	6.0	2.0 – 6.0	3/4-inch PVC	739816.70	976261.58	19.3	20.02
P-2	05/17/99	6.0	2.0 – 6.0	3/4-inch PVC	739817.27	976259.08	19.3	20.22
Product Recovery Wells								
MW8A	06/02/99	14.5	4.0 – 14.0	2-inch PVC	740034.10	976071.08	19.0	18.67
PR-1	06/02/99	14.5	3.6 – 13.6	2-inch PVC	740026.22	976090.39	18.9	18.64
PR-2	06/02/99	14.5	4.0 – 14.0	2-inch PVC	740008.71	976055.87	18.9	18.54
PR-3	10/09/99	18.0	2.0 – 17.0	2-inch PVC	740000.94	976026.62	18.9	18.68
PR-4	10/09/99	18.0	2.0 – 17.0	2-inch PVC	740020.46	976024.53	19.1	19.01
PR-5	10/09/99	18.0	2.0 – 17.0	2-inch PVC	740036.19	976043.98	19.4	19.11
PR-6	04/07/01	13.0	2.5 – 12.5	2-inch PVC	740050.15	976089.18	19.4	19.13
PR-7	04/07/01	15.0	3.0 – 13.0	2-inch PVC	740015.50	976029.74	19.2	18.97
CAP–Part B Monitoring Wells (utilized during corrective action)								
MW6	1996	~13.0	2.9 – 12.9	2-inch PVC	739964.64	976156.50	19.6	19.40
MW8	1996	~13.5	3.5 – 13.5	2-inch PVC	740030.55	976072.57	19.0	18.58
MW11	1996	~12.5	2.3 – 12.3	2-inch PVC	740111.90	975940.19	18.4	18.09
MW59	02/26/97	14.0	2.0 – 12.0	2-inch PVC	739989.17	976041.23	18.8	18.61
MW60	02/26/97	15.0	3.0 – 13.0	2-inch PVC	740059.72	976042.02	19.9	19.70
MW61	02/26/97	15.0	3.0 – 13.0	2-inch PVC	740068.72	976079.81	20.0	19.73
MW63	02/26/97	15.0	4.0 – 14.0	2-inch PVC	740090.82	976009.04	19.7	19.55
MW64	02/27/97	15.0	3.0 – 13.0	2-inch PVC	740011.54	975983.20	18.4	18.18

NOTES:
BGS Below ground surface
PVC Polyvinyl chloride

Table 2. Soil Analytical Results

Sample Location	Sample ID	Depth (feet BGS)	Date Sampled	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH (mg/kg)
Product Delineation Points –- Pre-Pilot Study Baseline Results – May 1999									
D1	AED111	7.2 – 8.2	05/06/99	***0.206 J***	0.181 J	0.297 J	0.952 U	0.684	15.2 U
D3	AED311	7.0 – 8.0	05/06/99	***0.111 J***	0.078 =	**0.651 =**	2.58 =	3.42	12.4 U
D4	AED411	8.0 – 9.1	05/06/99	***0.0718 J***	0.128 J	0.281 J	0.512 J	0.993	13.5 J
D5	AED511	6.9 – 8.9	05/06/99	***0.161 J***	**0.518 =**	0.0791 =	0.38 J	1.1381	48.4 J
D10	AEDA11	7.0 – 8.0	05/06/99	***0.625 =***	**9.76 =**	**4.52 =**	***23.2 =***	38.105	25.7 =
D13	AEDD11	8.0 – 8.8	05/05/99	0.0019 U	0.0019 U	0.0019 U	0.0052 U	ND	68.6 =
D15	AEDF11	8.0 – 8.8	05/06/99	***0.0144 J***	0.0057 J	0.643 J	0.283 J	0.9461	701 =
D17	AEDK11	7.0 – 8.0	05/06/99	**0.0098 =**	0.0019 U	0.0045 =	0.005 U	0.0143	12.8 J
D18	AEDL11	10.0 – 10.7	05/06/99	0.0016 J	0.0086 =	0.0104 =	0.0466 =	0.0672	11.8 U
D21	AEDM11	8.0 – 8.5	05/06/99	0.0019 U	0.0019 U	0.0019 U	0.0048 U	ND	22.8 =
D6	AED611	7.1 – 8.1	05/06/99	[a]	[a]	[a]	[a]	[a]	469 =
D7	AED711	8.0 – 9.0	05/06/99	[a]	[a]	[a]	[a]	[a]	2,000 =
D8	AED811	8.0 – 9.0	05/06/99	[a]	[a]	[a]	[a]	[a]	769 =
D9	AED911	4.5 – 6.5	05/06/99	[a]	[a]	[a]	[a]	[a]	405 =
D11	AEDB11	6.5 – 7.5	05/06/99	[a]	[a]	[a]	[a]	[a]	621 =
D12	AEDC11	7.8 – 8.8	05/06/99	[a]	[a]	[a]	[a]	[a]	127 =
D14	AEDE11	8.0 – 8.6	05/06/99	[a]	[a]	[a]	[a]	[a]	92.2 =
D16	AEDG11	6.2 – 7.2	05/06/99	[a]	[a]	[a]	[a]	[a]	578 =
Observation Points – Pre-Pilot Study Baseline Results – May 1999									
P1	AEP111	4.0 – 6.0	05/07/99	0.002 U	0.002 U	0.002 U	0.003 U	ND	119 =
P2	AEP211	4.0 – 6.0	05/07/99	0.0032 U	0.0032 U	0.0032 U	0.0049 U	ND	59.5 =
P3	AEP311	5.0 – 6.0	05/07/99	0.002 U	0.002 U	0.002 U	0.003 U	ND	1.61 U
P4	AEP411	5.4 – 6.4	05/07/99	0.0022 U	0.0022 U	0.0022 U	0.0032 U	ND	66.1 =
P5	AEP511	4.0 – 6.0	05/08/99	0.0028 U	0.0028 U	0.0028 U	0.0012 J	0.0012	105 =
Vapor Test Wells – Pre-Pilot Study Baseline Results – May 1999									
V1	AEV111	8.0 – 9.3	05/06/99	**0.0052 J**	0.0046 J	0.520 =	0.157 J	0.6868	[b]
V2	AEV211	8.0 – 9.2	05/07/99	**0.0069 J**	0.0010 J	0.0783 J	0.148 J	0.2342	[b]
VW-1	AEVW11	5.0 – 7.0	05/09/99	***0.0219 J***	0.0020 U	0.721 J	1.16 J	1.9029	[b]
GUST Soil Threshold Levels (Table A, Column 1)				0.005	0.37	0.40	20	NRC	NRC
Alternate Threshold Levels				0.012	58.5	11.1	20	—	—

NOTES:

Bold values exceed GUST soil threshold levels (Table A, Column 1).
Italic values exceed alternate threshold levels (Appendix VI).

[a] Samples were analyzed for TPH only.
[b] Samples were also analyzed for SVOCs, TPH-DRO, and TPH-GRO, with the results presented in Appendix V.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylenes
DRO Diesel-range organics
GRO Gasoline-range organics
GUST Georgia Underground Storage Tank
ND Not detected
NRC No regulatory criteria
SVOC Semivolatile organic compound
TPH Total petroleum hydrocarbons

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.
UJ Indicates that the compound was not detected above an approximated sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
= Indicates that the compound was detected at the concentration reported.

Table 3. Groundwater Analytical Results

Sample Location	Sample ID	Screened Interval (feet BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
CAP–Part B Investigation – March 1997								
MW1	MW0102	3.2 – 13.2	03/31/97	1 U	1 U	1 U	2 U	ND
MW2	MW0202	3.8 – 13.8	03/31/97	1 U	1 U	1 U	2 U	ND
MW3	MW0302	2.6 – 12.6	03/31/97	4.2 =	1 U	5.3 =	2 U	9.5
MW5	MW0502	3.3 – 13.3	03/31/97	1 U	1 U	1 U	2 U	ND
MW6	MW0602	2.9 – 12.9	04/01/97	24 =	6.4 =	54 =	27 =	111.4
MW9	MW0902	3.1 – 13.1	03/31/97	1 U	1 U	1 U	2 U	ND
MW10	MW1002	2.9 – 12.9	03/31/97	1 U	1 U	1 U	2 U	ND
MW11	MW1102	2.3 – 12.3	04/01/97	***1,700*** =	600 =	380 =	2,300 =	4,980
MW12	MW1202	2.9 – 12.9	04/01/97	56 J	28 J	40 J	50 UJ	124
MW13	MW1302	4.0 – 14.0	04/01/97	1.4 =	1 U	1 U	2 U	1.4
MW14	MW1402	4.0 – 14.0	04/01/97	1 U	1 U	1 U	2 U	ND
MW55	MW5501	2.0 – 12.0	03/31/97	1 U	1 U	1 U	2 U	ND
MW56	MW5601	1.4 – 11.4	03/31/97	17 =	3.3 =	9.1 =	34 =	63.4
MW57	MW5701	2.0 – 12.0	03/31/97	24 =	49 =	40 =	170 =	283
MW58	MW5801	2.0 – 12.0	03/31/97	41 J	11 J	16 J	94 J	162
MW60	MW6001	3.0 – 13.0	04/01/97	***1,400*** =	290 =	280 =	1,600 =	3,570
MW61	MW6101	3.0 – 13.0	04/01/97	***910 J***	25 UJ	140 J	760 J	1,810
MW63	MW6001	4.0 – 14.0	04/01/97	***2,400*** =	300 =	460 =	2,000 =	5,160
MW64	MW6101	3.0 – 13.0	04/01/97	***81*** =	50 =	36 =	320 =	487
MW65	MW6001	3.0 – 13.0	04/01/97	1 U	1 U	1 U	2 U	ND
MW66	MW6101	35.6 – 40.6	04/01/97	1 U	1 U	1 U	2 U	ND
MW67	MW6001	33.0 – 38.0	04/01/97	1 U	1 U	1 U	2 U	ND
Pre-Pilot Study Baseline Results – May 1999								
MW6	AE0612	2.9 – 12.9	05/10/99	2.1 J	2 U	2 U	3 U	2.1
MW11	AE1112	4.0 – 14.0	05/10/99	***256*** =	21.1 =	32.1 =	197 =	506.2
MW60	AE6012	3.0 – 13.0	05/10/99	***1,610*** =	122 =	300 =	1,330 =	3,362
MW61	AE6112	3.0 – 13.0	05/10/99	***612*** =	15 J	121 =	465 =	1,213
MW63	AE6312	4.0 – 14.0	05/10/99	***1,310*** =	113 =	154 =	710 =	2,287
MW64	AE6412	3.0 – 13.0	05/10/99	***107*** =	170 =	73.3 =	706 =	1,056.3
D1	AED112	2.0 – 12.0	05/10/99	***1,460*** =	111 =	284 =	725 =	2,580
D3	AED312	2.0 – 12.0	05/10/99	***2,580 J***	853 =	521 =	1,480 =	5,434
D4	AED412	2.0 – 12.0	05/10/99	***288*** =	76.4 =	89.5 =	211 =	664.9
D21	AEDM12	2.0 – 12.0	05/10/99	***251*** =	8.3 J	784 =	2,340 =	3,383.3
P1	AEP112	2.5 – 12.5	05/07/99	***1,890*** =	2,390 =	344 =	2,100 =	6,724
P2	AEP212	2.5 – 12.5	05/07/99	***2,510*** =	2,070 =	447 =	1,980 =	7,007
P3	AEP312	2.5 – 12.5	05/07/99	***2,600*** =	4,250 =	578 =	3,360 =	10,788
P4	AEP412	2.0 – 12.0	05/07/99	***823*** =	1,950 =	237 =	1,510 =	4,520
P5	AEP512	2.5 – 12.5	05/08/99	7.2 J	10 U	208 =	600 =	745.8
In-Stream Water Quality Standard (GA EPD Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limit				78	—	—	—	—

NOTES:

Bold values exceed In-Stream Water Quality Standard.
Italic values exceed alternate concentration limit.

BGS	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and xylenes
GA EPD	Georgia Environmental Protection Division
ND	Not detected
NRC	No regulatory criteria

Laboratory Qualifiers

U	Indicates that the compound was not detected above the reported sample quantitation limit.
UJ	Indicates that the compound was not detected above an approximated sample quantitation limit.
J	Indicates that the value for the compound was an estimated value.
=	Indicates that the compound was detected at the concentration reported.

Table 3. Groundwater Analytical Results (continued)

Sample Location	Sample ID	Screened Interval (feet BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
First Sampling Event – June 1999								
MW6	AE0622	2.9 – 12.9	06/15/99	3.7 =	0.56 J	3.5 =	1.9 J	9.66
MW11	AE1122	4.0 – 14.0	06/15/99	***114*** =	17.2 =	4.7 =	37.1 =	173
MW60	AE6022	3.0 – 13.0	06/15/99	***2,360*** =	180 =	411 =	1,900 =	4,851
MW61	AE6122	3.0 – 13.0	06/15/99	5.2 =	2 U	0.73 J	7.6 =	13.53
MW63	AE6322	4.0 – 14.0	06/15/99	***1,960*** =	226 =	245 =	1,140 =	3,571
MW64	AE6422	3.0 – 13.0	06/15/99	***149*** =	183 =	90.5 =	814 =	1,236.5
D1	AED122	2.0 – 12.0	06/15/99	58.5 =	2 U	3.7 =	16.7 =	78.9
D3	AED322	2.0 – 12.0	06/15/99	***3,180*** =	1,300 =	1,150 =	3,320 =	8,950
D4	AED422	2.0 – 12.0	06/15/99	***104*** =	50.3 =	25.5 =	126 =	305.8
D21	AEDM22	2.0 – 12.0	06/15/99	9.7 =	1.4 J	49.6 =	106 =	166.7
P1	AEP122	2.5 – 12.5	06/15/99	***2,420*** =	4,660 =	523 =	2,790 =	10,393
P2	AEP222	2.5 – 12.5	06/15/99	***3,370*** =	3,400 =	709 =	3,120 =	10,599
P3	AEP322	2.5 – 12.5	06/15/99	***3,200*** =	6,720 =	789 =	4,430 =	15,139
P4	AEP422	2.0 – 12.0	06/15/99	***2,010*** =	4,750 =	708 =	4,490 =	11,958
P5	AEP522	2.5 – 12.5	06/15/99	3 J	10 U	534 =	1,720 =	2,257
Second Sampling Event – July 1999								
MW6	AE0632	2.9 – 12.9	07/08/99	9.6 =	2 U	29.6 =	6 U	39.2
MW11	AE1132	4.0 – 14.0	07/08/99	0.82 J	2 U	2 U	6 U	2.82
MW60	AE6032	3.0 – 13.0	07/08/99	***3,260*** =	197 =	531 =	2,720 =	6,708
MW61	AE6132	3.0 – 13.0	07/08/99	1.1 J	0.56 J	2 U	1.3 J	2.96
MW63	AE6332	4.0 – 14.0	07/08/99	***648*** =	88.1 =	135 =	523 =	1,394.1
MW64	AE6432	3.0 – 13.0	07/08/99	***85.4*** =	154 =	72.3 =	624 =	935.7
D1	AED132	2.0 – 12.0	07/08/99	62.7 =	5 =	10.9 =	51.3 =	129.9
D3	AED332	2.0 – 12.0	07/08/99	***3,430*** =	3,830 =	1,250 =	4,460 =	12,970
D4	AED432	2.0 – 12.0	07/08/99	***111 J***	612 =	533 =	3180 =	4,436
D21	AEDM32	2.0 – 12.0	07/08/99	2 U	0.95 J	0.87 J	3.1 J	6.92
P1	AEP132	2.5 – 12.5	07/08/99	***1,770*** =	3,820 =	402 =	2,050 =	8,042
P2	AEP232	2.5 – 12.5	07/08/99	***2,540*** =	1,600 =	565 =	2,170 =	6,875
P3	AEP332	2.5 – 12.5	07/08/99	***3,150*** =	8,020 =	1,030 =	5,090 =	17,290
P4	AEP432	2.0 – 12.0	07/08/99	***1,990*** =	6,080 =	789 =	4,610 =	13,469
P5	AEP532	2.5 – 12.5	07/08/99	2 U	0.62 J	9.2 =	27.9 =	37.72
In-Stream Water Quality Standard (GA EPD Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limit				78	—	—	—	—

NOTES:

Bold values exceed In-Stream Water Quality Standard.
Italic values exceed alternate concentration limit.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylenes
GA EPD Georgia Environmental Protection Division
ND Not detected
NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.
UJ Indicates that the compound was not detected above an approximated sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
= Indicates that the compound was detected at the concentration reported.

Table 3. Groundwater Analytical Results (continued)

Sample Location	Sample ID	Screened Interval (feet BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
Third Sampling Event – August 1999								
MW6	AE0642	2.9 – 12.9	08/25/99	2 U	2 U	9.2 =	1.8 J	11
MW11	AE1142	4.0 – 14.0	08/25/99	13.7 =	2 U	1.3 J	10.1 =	25.1
MW60	AE6042	3.0 – 13.0	08/24/99	***257*** =	10 U	69.4 =	335 =	661.4
MW61	AE6142	3.0 – 13.0	08/25/99	33.1 =	0.56 J	4.4 =	11.2 =	49.26
MW63	AE6342	4.0 – 14.0	08/24/99	***844*** =	46.8 =	124 =	542 =	1,556.8
MW64	AE6442	3.0 – 13.0	08/24/99	19.8 =	0.71 J	21.9 =	109 =	151.41
D1	AED142	2.0 – 12.0	08/24/99	30.6 =	2 U	2 U	6 U	30.6
D3	AED342	2.0 – 12.0	08/24/99	***3,460*** =	2,330 =	1,530 =	4,550 =	11,870
D4	AED442	2.0 – 12.0	08/24/99	***130*** =	10 U	50.8 =	60.1 =	241
D21	AEDM42	2.0 – 12.0	08/24/99	2 U	2 U	0.62 J	0.86 J	1.48
P1	AEP142	2.5 – 12.5	08/24/99	***1,770*** =	3140 =	484 =	2,430 =	7,824
P2	AEP242	2.5 – 12.5	08/24/99	***3,020*** =	960 =	686 =	2,440 =	7,106
P3	AEP342	2.5 – 12.5	08/24/99	***1,940*** =	3,890 =	496 =	2,590 =	8,916
P4	AEP442	2.0 – 12.0	08/24/99	***516*** =	1,530 =	309 =	2,080 =	4,435
P5	AEP542	2.5 – 12.5	08/24/99	10 U	10 U	65.4 =	185 =	250.4
Fourth Sampling Event – September 1999								
MW6	AE0652	2.9 – 12.9	09/29/99	2 U	2 U	4.1 =	6 U	4.1
MW11	AE1152	4.0 – 14.0	09/29/99	27 =	15.5 =	3.8 =	20.1 =	66.4
MW60	AE6052	3.0 – 13.0	09/29/99	***98.2*** =	1.4 J	62.8 =	130 =	292.4
MW61	AE6152	3.0 – 13.0	09/29/99	37.4 =	2 U	4.8 =	9.4 =	51.6
MW63	AE6352	4.0 – 14.0	09/29/99	2.4 =	2 U	2 U	0.85 J	3.25
MW64	AE6452	3.0 – 13.0	09/29/99	4 =	2 U	3.8 =	18.6 =	26.4
D1	AED152	2.0 – 12.0	09/29/99	2.7 =	2 U	2 U	6 U	2.7
D3	AED352	2.0 – 12.0	09/29/99	***3,710*** =	1,840 =	1,910 =	4,940 =	12,400
D4	AED452	2.0 – 12.0	09/29/99	***1,360*** =	22.6 =	220 =	263 =	1,865.6
D21	AEDM52	2.0 – 12.0	09/29/99	2 U	2 U	0.6 J	0.79 J	1.39
P1	AEP152	2.5 – 12.5	09/29/99	***1,740*** =	3,360 =	431 =	2,470 =	8,001
P2	AEP252	2.5 – 12.5	09/29/99	***1,590*** =	273 U	405 =	1,390 =	3,385
P3	AEP352	2.5 – 12.5	09/29/99	***2,810*** =	5,680 =	838 =	4,550 =	13,878
P4	AEP452	2.0 – 12.0	09/29/99	***682*** =	443 =	239 =	1,110 =	2,474
P5	AEP552	2.5 – 12.5	09/29/99	2 U	2 U	2.6 =	7.6 =	7.6
In-Stream Water Quality Standard (GA EPD Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limit				78	—	—	—	—

NOTES:

Bold values exceed in-stream water quality standard
Italic values exceed alternate concentration limit

BGS	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and xylene
ND	Not detected
NRC	No regulatory criteria

Laboratory Qualifiers

U	Indicates that the compound was not detected above the reported sample quantitation limit.
UJ	Indicates that the compound was not detected above an approximated sample quantitation limit.
J	Indicates that the value for the compound was an estimated value.
=	Indicates that the compound was detected at the concentration reported.

Table 3. Groundwater Analytical Results (continued)

Sample Location	Sample ID	Screened Interval (feet BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
Fifth Sampling Event – October 1999								
MW6	AE0662	2.9 – 12.9	10/27/99	3.7 =	2 U	7.5 =	1.5 J	12.7
MW11	AE1162	4.0 – 14.0	10/27/99	2 U	2 U	0.55 J	0.53 J	1.08
MW60	AE6062	3.0 – 13.0	10/27/99	56.6 =	2 U	11.5 =	5.5 J	73.6
MW61	AE6162	3.0 – 13.0	10/27/99	46.9 =	8.7 =	7 =	14.6 =	77.2
MW63	AE6362	4.0 – 14.0	10/27/99	***715*** =	50 U	54.7 =	154 =	923.7
MW64	AE6462	3.0 – 13.0	10/27/99	2.2 =	2 U	2.9 =	21 =	26.1
D1	AED162	2.0 – 12.0	10/27/99	***1,650*** =	928 =	316 =	2,140 =	5,034
D3	AED362	2.0 – 12.0	10/27/99	***3,760*** =	2,680 =	2,070 =	6,020 =	14,530
D4	AED462	2.0 – 12.0	10/27/99	***2,320*** =	50 U	369 =	294 =	2,983
D21	AEDM62	2.0 – 12.0	10/27/99	1.3 J	1.6 J	1.9 J	3.3 J	8.1
P1	AEP162	2.5 – 12.5	10/27/99	0.78 J	2 U	2 U	0.84 J	1.62
P2	AEP252	2.5 – 12.5	10/27/99	***977*** =	70.9 =	192 =	698 =	1,937.9
P3	AEP362	2.5 – 12.5	10/27/99	***2,090*** =	3,180 =	632 =	4,120 =	10,022
P4	AEP462	2.0 – 12.0	10/27/99	11.5 =	37 =	40.4 =	216 =	304.9
P5	AEP552	2.5 – 12.5	10/27/99	1.1 J	2 U	6.6 =	17.6 =	25.3
Sixth Sampling Event – December 1999								
MW6	AE0672	2.9 – 12.9	12/01/99	3.8 J	2 UJ	12.2 J	2.6 J	18.6
MW11	AE1172	4.0 – 14.0	12/01/99	5.6 =	2 U	2 U	0.52 J	6.12
MW60	AE6072	3.0 – 13.0	12/01/99	40.8 =	2 U	2.3 =	1.2 J	44.3
MW61	AE6172	3.0 – 13.0	12/01/99	***773*** =	18.6 =	106 =	241 =	1,138.6
MW63	AE6372	4.0 – 14.0	12/01/99	***184*** =	4 U	2.7 J	57.8 =	244.5
MW64	AE6472	3.0 – 13.0	12/01/99	1 J	2 U	0.74 J	8.2 =	9.94
D1	AED172	2.0 – 12.0	12/01/99	1.2 J	2 U	2 U	0.56 J	1.76
D3	AED372	2.0 – 12.0	12/01/99	***3,700*** =	2,950 =	1,770 =	5,710 =	14,130
D4	AED472	2.0 – 12.0	12/01/99	***672*** =	7.5 J	26.9 =	21.6 J	728
D21	AEDM72	2.0 – 12.0	12/01/99	1.3 J	2 U	3 =	0.52 J	4.82
P1	AEP172	2.5 – 12.5	12/01/99	***576*** =	72.7 =	103 =	542 =	1,293.7
P2	AEP272	2.5 – 12.5	12/01/99	***586*** =	97.6 =	204 =	766 =	1,653.6
P3	AEP372	2.5 – 12.5	12/01/99	***523*** =	1,010 =	295 =	2,050 =	3,878
P4	AEP472	2.0 – 12.0	12/01/99	5.3 =	2.6 =	10.7 =	39.3 =	57.9
P5	AEP572	2.5 – 12.5	12/01/99	3.2 =	0.59 J	17.4 =	62 =	83.19
In-Stream Water Quality Standard (GA EPD Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limit				78	—	—	—	—

NOTES:

Bold values exceed In-Stream Water Quality Standard.
Italic values exceed alternate concentration limit.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylenes
GA EPD Georgia Environmental Protection Division
ND Not detected
NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.
UJ Indicates that the compound was not detected above an approximated sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
= Indicates that the compound was detected at the concentration reported.

Table 3. Groundwater Analytical Results (continued)

Sample Location	Sample ID	Screened Interval (feet BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
Seventh Sampling Event – January 2000								
MW6	AE0682	2.9 – 12.9	01/04/00	25.1 J	1 UJ	0.88 J	2.2 J	29.18
MW11	AE1182	4.0 – 14.0	01/04/00	48 =	27.3 =	25.9 =	144 =	245.2
MW60	AE6082	3.0 – 13.0	01/04/00	8 =	1 U	6.7 =	3.6 =	18.3
MW61	AE6182	3.0 – 13.0	01/04/00	***1,410*** =	14.8 U	180 =	346 =	1,936
MW63	AE6382	4.0 – 14.0	01/04/00	***78.8*** =	1 U	0.44 J	14.8 =	94.04
MW64	AE6482	3.0 – 13.0	01/04/00	1 =	1 U	0.37 J	8.7 =	10.07
D1	AED182	2.0 – 12.0	01/04/00	7 J	1 UJ	0.14 J	3 UJ	7.14
D3	AED382	2.0 – 12.0	01/04/00	***2,210 J***	1,150 J	1,010 J	3,180 J	7,550
D4	AED482	2.0 – 12.0	01/04/00	***821 J***	2 UJ	113 J	137 J	1,071
D21	AEDM82	2.0 – 12.0	01/04/00	0.2 J	1 U	0.47 J	1 J	1.67
P1	AEP182	2.5 – 12.5	01/04/00	***146 J***	3.8 UJ	40 J	152 J	338
P2	AEP282	2.5 – 12.5	01/04/00	***324 J***	100 UJ	120 J	403 J	847
P3	AEP382	2.5 – 12.5	01/04/00	***168 J***	206 J	116 J	573 J	1,063
P4	AEP482	2.0 – 12.0	01/04/00	1.2 J	1.2 UJ	2.2 J	22.4 J	25.8
P5	AEP582	2.5 – 12.5	01/04/00	2.3 J	5 U	273 =	679 =	954.3
Eighth Sampling Event – March 2000								
MW6	AE0692	2.9 – 12.9	03/28/00	2.4 =	1 U	2.5 U	4 U	2.4
MW11	AE1192	4.0 – 14.0	03/28/00	1 U	1 U	1 U	3.7 U	ND
MW60	AE6092	3.0 – 13.0	03/28/00	1 U	1 U	1.6 U	4.4 U	ND
MW61	AE6192	3.0 – 13.0	03/28/00	***1,160*** =	140 U	213 U	580 U	1,160
MW63	AE6392	4.0 – 14.0	03/28/00	***198*** =	1 U	6.8 U	52.2 U	198
D1	AED192	2.0 – 12.0	03/28/00	3.7 =	20.6 =	6.3 U	60.7 U	24.3
D3	AED392	2.0 – 12.0	03/28/00	***1,820*** =	1,590 =	1,250 =	5,280 =	9,940
D4	AED492	2.0 – 12.0	03/28/00	***532*** =	9.4 =	78.2 =	2,860 =	3,479.6
D6	AED692	2.0 – 12.0	03/28/00	***958*** =	9,350 =	2,510 =	16,700 =	29,518
D10	AED092	2.0 – 12.0	03/28/00	***538*** =	2,820 =	578 =	5,780 =	9,716
D17	AEDG92	2.0 – 12.0	03/28/00	***114 J***	1,550 =	1,320 =	9,840 =	12,824
P1	AEP192	2.5 – 12.5	03/28/00	***85.1*** =	1 U	4.9 U	67.5 U	85.1
P2	AEP292	2.5 – 12.5	03/28/00	41.4 =	4.3 U	34.2 =	191 =	266.6
P3	AEP392	2.5 – 12.5	03/28/00	***98.1*** =	1 U	12.8 =	198 =	308.9
P4	AEP492	2.0 – 12.0	03/28/00	1 U	1 U	1.6 U	7.8 U	ND
In-Stream Water Quality Standard (GA EPD Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limit				78	—	—	—	—

NOTES:

Due to the continuing nondetects in MW64, D19, and P5, sampling was discontinued in these wells in March 2000 in lieu of samples collected from D6, D10, and D17, which are located in the area in which free product recovery is taking place.

Bold values exceed In-Stream Water Quality Standard.

Italic values exceed alternate concentration limit.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylenes
GA EPD Georgia Environmental Protection Division
ND Not detected
NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.
UJ Indicates that the compound was not detected above an approximated sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
= Indicates that the compound was detected at the concentration reported.

Table 3. Groundwater Analytical Results (continued)

Sample Location	Sample ID	Screened Interval (feet BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
Ninth Sampling Event – May 2000								
MW6	AE0602	2.9 – 12.9	05/23/00	5.2 =	0.43 J	7.1 =	3.3 =	16.03
MW11	AE1102	4.0 – 14.0	05/23/00	1 U	1 U	1 U	0.23 J	0.23
MW60	AE6002	3.0 – 13.0	05/23/00	2.3 =	1 U	0.44 J	1.2 J	3.94
MW61	AE6102	3.0 – 13.0	05/23/00	***2,010 J***	152 =	584 =	1,640 =	4,386
MW63	AE6302	4.0 – 14.0	05/23/00	53.4 =	1 U	0.69 J	13.2 =	67.29
D1	AED102	2.0 – 12.0	05/23/00	8.3 =	1 U	0.52 J	4.1 =	12.92
D3	AED302	2.0 – 12.0	05/23/00	***671*** =	130 =	422 =	2,040 =	3,263
D4	AED402	2.0 – 12.0	05/23/00	***541 J***	18.8 =	64.5 =	277 =	901.3
D6	AED602	2.0 – 12.0	05/23/00	***1,320 J***	1,160 J	573 =	4,300 J	7,353
D10	AED002	2.0 – 12.0	05/23/00	***460*** =	2,160 J	360 =	4,110 =	7,090
D17	AEDG02	2.0 – 12.0	05/23/00	**75.4** =	814 =	505 J	2,170 =	3,564.4
P1	AEP102	2.5 – 12.5	05/23/00	***88.7*** =	1 U	7.6 =	83.6 =	179.9
P2	AEP202	2.5 – 12.5	05/23/00	68.2 =	1.4 =	11 =	91.1 =	171.7
P3	AEP302	2.5 – 12.5	05/23/00	**74.3** =	0.31 J	9.3 =	115 =	198.91
P4	AEP402	2.0 – 12.0	05/23/00	1 U	1 U	0.22 J	1.6 J	1.82
Tenth Sampling Event – July 2000								
MW6	AE06A2	2.9 – 12.9	07/19/00	5.8 =	0.43 J	8.8 =	4.3 =	19.33
MW11	AE11A2	4.0 – 14.0	07/19/00	2.2 =	0.52 J	1 U	3.3 =	6.02
MW60	AE60A2	3.0 – 13.0	07/19/00	2.7 =	1 U	1 U	1.6 J	4.3
MW61	AE61A2	3.0 – 13.0	07/19/00	***912*** =	149 =	249 =	679 =	1,989
MW63	AE63A2	4.0 – 14.0	07/19/00	27 =	1 U	1.1 =	9.2 =	37.3
D1	AED1A2	2.0 – 12.0	07/19/00	1 U	0.9 J	1.5 =	3.1 =	5.5
D3	AED3A2	2.0 – 12.0	07/21/00	***87.8*** =	23.7 =	182 =	361 =	654.5
D4	AED4A2	2.0 – 12.0	07/21/00	1.6 =	3.1 =	4.8 =	166 =	175.5
D6	AED6A2	2.0 – 12.0	07/21/00	***149*** =	85.1 =	73.8 =	2,210 =	2,517.9
D10	AED0A2	2.0 – 12.0	07/21/00	***335*** =	3,930 =	565 =	8,490 =	13,320
D17	AEDGA2	2.0 – 12.0	07/21/00	9.6 =	74.9 =	194 =	558 =	836.5
P1	AEP1A2	2.5 – 12.5	07/21/00	***94.9*** =	1.2 =	13.6 =	130 =	239.7
P2	AEP2A2	2.5 – 12.5	07/21/00	24.3 =	8.7 =	4.1 =	49 =	86.1
P3	AEP3A2	2.5 – 12.5	07/21/00	46.2 =	2 =	7.4 =	133 =	188.6
P4	AEP4A2	2.0 – 12.0	07/21/00	***295*** =	2.6 =	11.7 =	17.2 =	326.5
In-Stream Water Quality Standard (GA EPD Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limit				78	—	—	—	—

NOTES:

Due to the continuing nondetects in MW64, D19, and P5, sampling was discontinued in these wells in March 2000 in lieu of samples collected from D6, D10, and D17, which are located in the area in which free product recovery is taking place.

Bold values exceed In-Stream Water Quality Standard.

Italic values exceed alternate concentration limit.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylenes
GA EPD Georgia Environmental Protection Division
ND Not detected
NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.
UJ Indicates that the compound was not detected above an approximated sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
= Indicates that the compound was detected at the concentration reported.

Table 3. Groundwater Analytical Results (continued)

Sample Location	Sample ID	Screened Interval (feet BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
Eleventh Sampling Event – September 2000								
MW6	AE06B2	2.9 – 12.9	09/26/00	2.6 =	1 U	6.1 =	1.7 J	10.4
MW11	AE11B2	4.0 – 14.0	09/26/00	0.3 J	1 U	1 U	0.15 J	0.45
MW60	AE60B2	3.0 – 13.0	09/26/00	1.2 =	1 U	0.4 J	0.46 J	2.06
MW61	AE61B2	3.0 – 13.0	09/26/00	4.5 =	13.2 =	2 =	11.7 =	31.4
MW63	AE63B2	4.0 – 14.0	09/26/00	3.3 =	1 U	0.61 J	3.7 =	7.61
D1	AED1B2	2.0 – 12.0	09/26/00	1.6 =	1 U	0.46 J	4.1 =	6.16
D3	AED3B2	2.0 – 12.0	09/26/00	***660 J***	540 J	579 J	1,730 J	3,509
D4	AED4B2	2.0 – 12.0	09/26/00	***763*** =	10 U	46.4 =	91.1 =	900.5
D6	AED6B2	2.0 – 12.0	09/26/00	***742*** =	367 =	195 =	2,410 =	3,714
D10	AED0B2	2.0 – 12.0	09/26/00	***2,500 U***	99,900 =	**60,000** =	617,000 =	776,900
D17	AEDGB2	2.0 – 12.0	09/26/00	***146*** =	3,800 =	1,190 =	5,830 =	10,966
P1	AEP1B2	2.5 – 12.5	09/26/00	33.6 =	2.3 U	1.04 =	49.7 =	93.7
P2	AEP2B2	2.5 – 12.5	09/26/00	21.3 =	2 U	2.3 =	10.5 =	34.1
P3	AEP3B2	2.5 – 12.5	09/26/00	27 =	1 U	3 =	33.3 =	63.3
P4	AEP4B2	2.0 – 12.0	09/26/00	0.91 =	2 U	1.4 =	12.6 =	14.91
Twelfth Sampling Event – November/December 2000								
MW60	AE60C2	3.0 – 13.0	12/01/00	6.5 =	1 U	0.18 J	0.38 J	7.06
MW61	AE61C2	3.0 – 13.0	12/01/00	38.6 =	16.3 =	52.2 =	167 =	274.1
MW63	AE63C2	4.0 – 14.0	12/01/00	0.56 J	1 U	1 U	0.38 J	0.94
D3	AED3C2	2.0 – 12.0	12/01/00	***338*** =	43.3 =	341 =	718 =	1,440.3
D4	AED4C2	2.0 – 12.0	12/01/00	***545*** =	10 U	62.2 =	64.9 =	672.1
D6	AED6C2	2.0 – 12.0	12/01/00	***1,140*** =	80.2 =	66.2 =	860 =	2,146.4
D7	AED7C2	2.0 – 12.0	12/01/00	***633*** =	10 =	870 =	1,010 =	2,523
D9	AED9C2	2.0 – 12.0	12/01/00	***885*** =	25 =	600 =	2,150 =	3,660
D10	AED0C2	2.0 – 12.0	12/01/00	67.2 =	985 =	167 =	7,570 =	8,789.2
D12	AEDBC2	2.0 – 12.0	12/01/00	15.9 =	1 U	2.2 =	4.8 =	22.9
D14	AEDDC2	2.0 – 12.0	12/01/00	***87*** =	0.72 J	96.8 =	113 =	297.52
D17	AEDGC2	2.0 – 12.0	12/01/00	4.6 =	54.5 =	29.7 =	269 =	357.8
D19	AEDJC2	2.0 – 12.0	12/01/00	***108 J***	0.7 J	18.9 =	23.8 =	151.4
P1	AEP1C2	2.5 – 12.5	12/01/00	1.2 =	1 U	0.28 J	1.6 J	3.08
P2	AEP2C2	2.5 – 12.5	12/01/00	6.2 =	1 U	0.81 J	3.4 =	10.41
P4	AEP4C2	2.0 – 12.0	12/01/00	3.3 =	1.9 =	1.4 =	5 =	11.6
In-Stream Water Quality Standard (GA EPD Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limit				78	—	—	—	—

NOTES:

Due to the continuing nondetects in MW64, D19, and P5, sampling was discontinued in these wells in March 2000 in lieu of samples collected from D6, D10, and D17, which are located in the area in which free product recovery is taking place.

Bold values exceed In-Stream Water Quality Standard.

Italic values exceed alternate concentration limit.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylenes
GA EPD Georgia Environmental Protection Division
ND Not detected
NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.
UJ Indicates that the compound was not detected above an approximated sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
= Indicates that the compound was detected at the concentration reported.

Table 3. Groundwater Analytical Results (continued)

Sample Location	Sample ID	Screened Interval (feet BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
Thirteenth Sampling Event – February 2001								
MW60	AE60D2	3.0 – 13.0	02/01/01	1.3 J	2 U	0.45 J	0.7 J	2.45
MW61	AE61D2	3.0 – 13.0	02/01/01	43.2 =	12.7 =	144 =	419 =	618.9
MW63	AE63D2	4.0 – 14.0	02/01/01	0.35 J	2 U	0.19 J	0.5 J	1.04
D3	AED3D2	2.0 – 12.0	02/01/01	66.4 J	2,280 =	443 =	7,950 =	10,739.4
D4	AED4D2	2.0 – 12.0	02/01/01	***197*** =	30.5 =	15.9 =	135 =	378.4
D6	AED6D2	2.0 – 12.0	02/01/01	***157*** =	11.5 =	42.4 =	500 =	710.9
D7	AED7D2	2.0 – 12.0	02/01/01	***724*** =	22.5 U	1,010 J	1,160 =	2,894
D9	AED9D2	2.0 – 12.0	02/01/01	***1,180*** =	50 U	884 =	2,910 =	4,974
D10	AED0D2	2.0 – 12.0	02/01/01	**78** =	970 =	186 =	2,740 =	3,974
D12	AEDBD2	2.0 – 12.0	02/01/01	0.28 J	2 U	0.39 J	5 =	5.67
D14	AEDDD2	2.0 – 12.0	02/01/01	48.6 =	19.2 =	39.9 =	160 =	267.7
D17	AEDGD2	2.0 – 12.0	02/01/01	9.4 =	21.5 =	12.8 =	174 =	217.7
D19	AEDJD2	2.0 – 12.0	02/01/01	63.8 =	2 U	21.4 =	19.8 =	105
P1	AEP1D2	2.5 – 12.5	02/01/01	12.6 =	2 U	3.7 =	24.4 =	40.7
P2	AEP2D2	2.5 – 12.5	02/01/01	5.8 =	2 U	0.76 J	4.7 J	11.26
P4	AEP4D2	2.0 – 12.0	02/01/01	15.7 =	3.5 U	0.76 J	12.8 =	29.26
Fourteenth Sampling Event – April 2001								
MW60	AE60E2	3.0 – 13.0	04/07/01	1.3 =	0.29 J	1 U	3 U	1.59
MW61	AE61E2	3.0 – 13.0	04/07/01	30.7 =	66 =	101 =	283 =	480.7
MW63	AE63E2	4.0 – 14.0	04/07/01	1 U	0.34 J	1 U	3 U	0.34
D3	AED3E2	2.0 – 12.0	04/08/01	21.8 =	2.7 =	64 =	108 =	196.5
D4	AED4E2	2.0 – 12.0	04/08/01	***476*** =	1.8 J	7.5 J	8.4 J	493.7
D6	AED6E2	2.0 – 12.0	04/08/01	***235*** =	8.5 J	25.7 =	211 =	480.2
D7	AED7E2	2.0 – 12.0	04/08/01	***111*** =	2.4 J	200 =	226 =	539.4
D9	AED9E2	2.0 – 12.0	04/07/01	***443*** =	14.9 =	500 =	1,940 =	2,897.9
D10	AED0E2	2.0 – 12.0	04/07/01	18.6 J	1,440 =	336 =	14,700 =	16,494.6
D12	AEDBE2	2.0 – 12.0	04/08/01	0.27 J	2 U	2 U	5 U	0.27
D14	AEDEE2	2.0 – 12.0	04/07/01	28.5 =	0.64 J	60 =	106 =	195.14
D17	AEDGE2	2.0 – 12.0	04/08/01	10.9 =	0.76 J	0.66 J	43.1 =	55.42
D19	AEDJE2	2.0 – 12.0	04/07/01	***114*** =	1.6 J	33.5 =	124 =	273.1
P1	AEP1E2	2.5 – 12.5	04/07/01	6.8 =	0.34 J	1.5 =	8.1 =	16.74
P2	AEP2E2	2.5 – 12.5	04/07/01	2.9 =	0.28 J	0.26 J	1.1 J	4.54
P4	AEP4E2	2.0 – 12.0	04/07/01	0.59 J	1 U	1 U	0.93 J	1.52
In-Stream Water Quality Standard (GA EPD Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limit				78	—	—	—	—

NOTES:

Due to the continuing nondetects in MW64, D19, and P5, sampling was discontinued in these wells in March 2000 in lieu of samples collected from D6, D10, and D17, which are located in the area in which free product recovery is taking place.

Bold values exceed In-Stream Water Quality Standard.

Italic values exceed alternate concentration limit.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylenes
GA EPD Georgia Environmental Protection Division
ND Not detected
NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.
UJ Indicates that the compound was not detected above an approximated sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
= Indicates that the compound was detected at the concentration reported.

Table 3. Groundwater Analytical Results (continued)

Sample Location	Sample ID	Screened Interval (feet BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
Fifteenth Sampling Event – June 2001								
MW60	AE60F2	3.0 – 13.0	06/07/01	0.38 J	2 U	0.16 J	5 U	0.54
MW61	AE61F2	3.0 – 13.0	06/07/01	2 U	2 U	0.21 J	5 U	0.21
MW63	AE63F2	4.0 – 14.0	06/07/01	2 U	2 U	2 U	2 U	ND
AE-D3/PR-6	AER6F2	2.0 – 12.0	06/07/01	3.1 =	2.9 U	12.1 =	29 =	44.2
D4	AED4F2	2.0 – 12.0	06/07/01	***412*** =	10 U	5 J	20.2 J	437.2
D6	AED6F2	2.0 – 12.0	06/07/01	***364*** =	10 U	29.2 =	93.1 =	486.3
D7	AED7F2	2.0 – 12.0	06/07/01	***394*** =	20 U	641 =	586 =	1,621
D9	AED9F2	2.0 – 12.0	06/07/01	***988*** =	28.2 U	688 =	2,540 =	4,216
D10	AED0F2	2.0 – 12.0	06/07/01	1.6 J	10 U	10 U	185 =	186.6
D12	AEDBF2	2.0 – 12.0	06/07/01	***92.1*** =	2 U	0.49 J	13.2 =	105.79
D14	AEDEF2	2.0 – 12.0	06/07/01	64.8 =	2 U	45.5 =	97.4 =	207.7
D17	AEDGF2	2.0 – 12.0	06/07/01	9.2 =	2 U	0.18 J	1.3 J	10.68
D19	AEDJF2	2.0 – 12.0	06/07/01	***100*** =	2 U	39.4 =	33.2 =	172.6
P1	AEP1F2	2.5 – 12.5	06/07/01	2.2 =	2 U	2 U	1.5 J	3.7
P2	AEP2F2	2.5 – 12.5	06/07/01	0.82 J	2 U	0.31 J	0.6 J	1.73
P4	AEP4F2	2.0 – 12.0	06/07/01	0.35 J	2 U	2 U	5 U	0.35
Sixteenth Sampling Event – August 2001								
MW60	AE60G2	3.0 – 13.0	08/08/01	0.21 J	2 U	0.24 J	0.71 J	1.16
MW61	AE61G2	3.0 – 13.0	08/08/01	11.4 =	10.2 =	80.0 =	201 =	302.6
MW63	AE63G2	4.0 – 14.0	08/08/01	2 U	2 U	2 U	0.35 J	0.35
AE-D3/PR-6	AER6G2	2.0 – 12.0	08/08/01	0.77 J	4 U	108 =	185 =	293.77
D4	AED4G2	2.0 – 12.0	08/08/01	13.2 =	2 U	13.0 =	1.9 J	28.1
D6	AED6G2	2.0 – 12.0	08/08/01	***94.4*** =	2 U	21.2 =	38.9 =	154.5
D7	AED7G2	2.0 – 12.0	08/08/01	***196*** =	20 U	341 =	316 =	853
D9	AED9G2	2.0 – 12.0	08/08/01	***885*** =	28.5 =	901 =	2,630 =	4,444.5
D10	AED0G2	2.0 – 12.0	08/08/01	57.3 =	2 U	0.25 J	76.9 =	134.45
D12	AEDBG2	2.0 – 12.0	08/08/01	14.4 =	2 U	2 U	0.38 J	14.78
D14	AEDDG2	2.0 – 12.0	08/08/01	42.8 =	2 U	14.6 =	41.1 =	98.5
D17	AEDGG2	2.0 – 12.0	08/08/01	12.3 =	2 U	2 U	0.67 J	12.97
D19	AEDJG2	2.0 – 12.0	08/08/01	53.0 =	2 U	28.0 =	16.8 =	97.8
P1	AEP1G2	2.5 – 12.5	08/08/01	2.9 =	2 U	2 U	2.1 J	5.0
P2	AEP2G2	2.5 – 12.5	08/08/01	0.57 J	2 U	0.43 J	0.44 J	1.44
P4	AEP4G2	2.0 – 12.0	08/08/01	0.17 J	2 U	0.20 J	0.83 J	1.2
In-Stream Water Quality Standard (GA EPD Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limit				78	—	—	—	—

NOTES:

Due to the continuing nondetects in MW64, D19, and P5, sampling was discontinued in these wells in March 2000 in lieu of samples collected from D6, D10, and D17, which are located in the area in which free product recovery is taking place.

Bold values exceed In-Stream Water Quality Standard.

Italic values exceed alternate concentration limit.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylenes
GA EPD Georgia Environmental Protection Division
ND Not detected
NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.
UJ Indicates that the compound was not detected above an approximated sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
= Indicates that the compound was detected at the concentration reported.

Table 3. Groundwater Analytical Results (continued)

Sample Location	Sample ID	Screened Interval (feet BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
Seventeenth Sampling Event – October 2001								
MW60	AE60H2	3.0 – 13.0	10/04/01	0.39 J	2 U	0.89 J	1.4 J	2.68
MW61	AE61H2	3.0 – 13.0	10/04/01	28.7 J	13.8 =	61.0 =	119 =	222.50
MW63	AE63H2	4.0 – 14.0	10/04/01	0.20 J	2 U	2 U	5 U	0.20
AE-D3/PR-6	AER6H2	2.0 – 12.0	10/04/01	1.5 J	0.69 J	130 =	267 =	399.19
D4	AED4H2	2.0 – 12.0	10/04/01	***427*** J	1.1 J	48.3 =	34.6 =	511.00
D6	AED6H2	2.0 – 12.0	10/04/01	***135*** J	1.5 J	24.2 =	51.9 =	212.6
D7	AED7H2	2.0 – 12.0	10/04/01	***194*** J	2.9 J	346 =	281 =	823.9
D9	AED9H2	2.0 – 12.0	10/04/01	***643*** J	20.3 J	734 =	2,720 =	4,117.30
D10	AED0H2	2.0 – 12.0	10/04/01	29.0 J	4 U	0.40 J	11.1 =	40.50
D12	AEDBH2	2.0 – 12.0	10/04/01	8.5 J	0.83 J	2 U	0.60 J	9.93
D14	AEDDH2	2.0 – 12.0	10/04/01	33.1 J	0.96 J	16.7 =	57.3 =	108.06
D17	AEDGH2	2.0 – 12.0	10/04/01	13.9 J	2 U	0.59 J	0.80 J	15.29
D19	AEDJH2	2.0 – 12.0	10/04/01	17.1 J	0.37 J	10.2 =	4.2 J	31.87
P1	AEP1H2	2.5 – 12.5	10/04/01	12.2 J	2 U	1.6 J	15.1 =	28.90
P2	AEP2H2	2.5 – 12.5	10/04/01	0.60 J	2 U	0.70 J	0.58 J	1.88
P4	AEP4H2	2.0 – 12.0	10/04/01	0.33 J	0.26 J	2 U	0.20 J	0.79
Eighteenth Sampling Event – December 2001								
MW60	AE60J2	3.0 – 13.0	12/01/01	2 U	2 U	2 U	5 U	ND
MW61	AE61J2	3.0 – 13.0	12/01/01	2 U	2 U	2 U	5 U	ND
MW63	AE63J2	4.0 – 14.0	12/01/01	2 U	2 U	2 U	5 U	ND
AE-D3/PR-6	AER6J2	2.0 – 12.0	12/01/01	36.0 =	14.0 =	109 =	178 =	337.00
D4	AED4J2	2.0 – 12.0	12/01/01	***99.1*** =	4.0 U	5.2 =	1.2 J	109.50
D6	AED6J2	2.0 – 12.0	12/01/01	24.6 =	2 U	0.95 J	2.7 J	28.25
D7	AED7J2	2.0 – 12.0	12/01/01	***174*** =	20 U	363 =	199 =	736.00
D9	AED9J2	2.0 – 12.0	12/01/01	***882*** =	40 U	682 =	2,340 =	3,904.00
D10	AED0J2	2.0 – 12.0	12/01/01	7.3 =	2 U	7.4 =	29.1 =	43.80
D12	AEDBJ2	2.0 – 12.0	12/01/01	**74.8** =	2 U	23.5 =	28.4 =	126.70
D14	AEDDJ2	2.0 – 12.0	12/01/01	52.9 =	2 U	18.1 =	60.0 =	131.00
D17	AEDGJ2	2.0 – 12.0	12/01/01	5.7 =	2 U	8.5 =	12.8 =	27.00
D19	AEDJJ2	2.0 – 12.0	12/01/01	41.3 =	2 U	22.4 =	37.0 =	100.70
P1	AEP1J2	2.5 – 12.5	12/01/01	10.2 =	2 U	1.6 J	12.8 =	24.60
P2	AEP2J2	2.5 – 12.5	12/01/01	0.41 J	2 U	0.26 J	5 U	0.67
P4	AEP4J2	2.0 – 12.0	12/01/01	2 U	2 U	2 U	5 U	ND
In-Stream Water Quality Standard (GA EPD Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limit				78	—	—	—	—

NOTES:

Due to the continuing nondetects in MW64, D19, and P5, sampling was discontinued in these wells in March 2000 in lieu of samples collected from D6, D10, and D17, which are located in the area in which free product recovery is taking place.

Bold values exceed In-Stream Water Quality Standard.

Italic values exceed alternate concentration limit.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylenes
GA EPD Georgia Environmental Protection Division
ND Not detected
NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.
UJ Indicates that the compound was not detected above an approximated sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
= Indicates that the compound was detected at the concentration reported.

Table 3. Groundwater Analytical Results (continued)

Sample Location	Sample ID	Screened Interval (feet BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
Nineteenth Sampling Event – February 2002								
MW60	AE60K2	3.0 – 13.0	02/20/02	2 U	2 U	2 U	5 U	ND
MW61	AE61K2	3.0 – 13.0	02/20/02	3.3 =	0.21 J	4.7 =	2.2 J	10.41
MW63	AE63K2	4.0 – 14.0	02/20/02	2 U	0.17 J	2 U	5 U	0.17
AE-D3/PR-6	AER6K2	2.0 – 12.0	02/20/02	0.64 J	0.30 J	3.9 =	1.3 J	6.14
D4	AED4K2	2.0 – 12.0	02/19/02	14.2 =	2 U	3.8 =	0.60 J	18.60
D6	AED6K2	2.0 – 12.0	02/20/02	***89.3*** =	0.51 J	14.3 =	8.7 =	112.81
D7	AED7K2	2.0 – 12.0	02/20/02	***164*** =	1.8 J	190 =	181 =	536.80
D9	AED9K2	2.0 – 12.0	02/19/02	***924*** =	26.8 =	791 =	2,560 =	4,301.80
D10	AED0K2	2.0 – 12.0	02/20/02	3.4 =	0.23 J	1.4 J	3.0 J	8.03
D12	AEDBK2	2.0 – 12.0	02/20/02	3.8 =	0.20 J	0.37 J	0.85 J	5.22
D14	AEDDK2	2.0 – 12.0	02/20/02	64.1 =	0.54 J	8.7 =	32.6 =	105.94
D17	AEDGK2	2.0 – 12.0	02/20/02	4.7 =	0.20 J	0.49 J	5 U	5.39
D19	AEDJK2	2.0 – 12.0	02/20/02	54.4 =	0.51 J	13.4 =	2.3 J	70.61
P1	AEP1K2	2.5 – 12.5	02/20/02	1.5 J	2 U	2 U	0.62 J	2.12
P2	AEP2K2	2.5 – 12.5	02/20/02	0.51 J	2 U	2 U	5 U	0.51
P4	AEP4K2	2.0 – 12.0	02/20/02	2 U	2 U	2 U	5 U	ND
Twentieth Sampling Event – April 2002								
MW60	AE60M2	3.0 – 13.0	04/09/02	2 U	2 U	2 U	5 U	ND
MW61	AE61M2	3.0 – 13.0	04/09/02	2 U	2 U	2 U	5 U	ND
MW63	AE63M2	4.0 – 14.0	04/09/02	2 U	2 U	2 U	5 U	ND
AE-D3/PR-6	AER6M2	2.0 – 12.0	04/09/02	0.62 J	2 U	19.8 =	3.8 J	24.22
D4	AED4M2	2.0 – 12.0	04/09/02	27.5 =	2 U	4.4 =	2.9 J	34.80
D6	AED6M2	2.0 – 12.0	04/09/02	29.9 =	2 U	6.7 =	12.4 =	49.00
D7	AED7M2	2.0 – 12.0	04/09/02	***85.9*** =	4 U	158 =	81.6 =	325.50
D9	AED9M2	2.0 – 12.0	04/09/02	***817*** =	23.6 =	692 =	1,850 =	3,382.60
D10	AED0M2	2.0 – 12.0	04/09/02	6.1 =	2 U	1.7 J	6.2 =	14.00
D12	AEDBM2	2.0 – 12.0	04/09/02	3.3 =	2 U	6.4 =	19.7 =	29.40
D14	AEDDM2	2.0 – 12.0	04/09/02	31.8 =	2 U	13.1 =	47.9 =	92.80
D17	AEDGM2	2.0 – 12.0	04/09/02	6.7 =	2 U	8.1 =	25.4 =	40.20
D19	AEDJM2	2.0 – 12.0	04/09/02	49.0 =	2 U	19.1 =	24.0 =	92.10
P1	AEP1M2	2.5 – 12.5	04/09/02	1.5 J	2 U	0.68 J	2.5 J	4.68
P2	AEP2M2	2.5 – 12.5	04/09/02	0.31 J	2 U	0.48 J	1.6 J	2.39
P4	AEP4M2	2.0 – 12.0	04/09/02	0.69 J	2 U	1.3 J	4.2 J	6.17
In-Stream Water Quality Standard (GA EPD Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limit				78	—	—	—	—

NOTES:

Due to the continuing nondetects in MW64, D19, and P5, sampling was discontinued in these wells in March 2000 in lieu of samples collected from D6, D10, and D17, which are located in the area in which free product recovery is taking place.

Bold values exceed In-Stream Water Quality Standard.

Italic values exceed alternate concentration limit.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylenes
GA EPD Georgia Environmental Protection Division
ND Not detected
NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.
UJ Indicates that the compound was not detected above an approximated sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
= Indicates that the compound was detected at the concentration reported.

Table 3. Groundwater Analytical Results (continued)

Sample Location	Sample ID	Screened Interval (feet BGS)	Date Sampled	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	Total BTEX (µg/L)
Twenty-first Sampling Event – June 2002								
MW60	AE60N2	3.0 – 13.0	06/09/02	2 U	2 U	2 U	5 U	ND
MW61	AE61N2	3.0 – 13.0	06/07/02	7.8 =	2 U	4.8 =	5.8 =	18.40
MW63	AE63N2	4.0 – 14.0	06/09/02	0.41 J	2 U	2 U	5 U	0.41
AE-D3/PR-6	AER6N2	2.0 – 12.0	06/09/02	1.5 J	2.0 =	27.5 =	34.0 =	65.00
D4	AED4N2	2.0 – 12.0	06/08/02	69.5 =	2.0 =	8.6 =	3.1 J	83.20
D6	AED6N2	2.0 – 12.0	06/08/02	***143*** =	1.1 J	47.8 =	61.7 =	253.60
D7	AED7N2	2.0 – 12.0	06/08/02	61.8 =	0.96 J	127 =	112 =	301.76
D9	AED9N2	2.0 – 12.0	06/08/02	***574*** =	15.7 J	506 =	1,690 =	2,785.70
D10	AED0N2	2.0 – 12.0	06/08/02	2 U	2 U	2 U	5 U	ND
D12	AEDBN2	2.0 – 12.0	06/08/02	2 U	2 U	2 U	5 U	ND
D14	AEDDN2	2.0 – 12.0	06/08/02	7.7 =	2 U	1.6 J	3.5 J	12.80
D17	AEDGN2	2.0 – 12.0	06/08/02	1.2 J	2 U	1.1 J	1.6 J	3.90
D19	AEDJN2	2.0 – 12.0	06/08/02	14.9 =	2 U	3.9 =	0.70 J	19.50
P1	AEP1N2	2.5 – 12.5	06/08/02	2 U	2 U	2 U	5 U	ND
P2	AEP2N2	2.5 – 12.5	06/08/02	0.35 J	2 U	2 U	5 U	0.35
P4	AEP4N2	2.0 – 12.0	06/08/02	2 U	2 U	2 U	5 U	ND
In-Stream Water Quality Standard (GA EPD Chapter 391-3-6)				71.28	200,000	28,718	NRC	NRC
Alternate Concentration Limit				78	—	—	—	—

NOTES:

Due to the continuing nondetects in MW64, D19, and P5, sampling was discontinued in these wells in March 2000 in lieu of samples collected from D6, D10, and D17, which are located in the area in which free product recovery is taking place.

Bold values exceed In-Stream Water Quality Standard.

Italic values exceed alternate concentration limit.

BGS Below ground surface
BTEX Benzene, toluene, ethylbenzene, and xylenes
GA EPD Georgia Environmental Protection Division
ND Not detected
NRC No regulatory criteria

Laboratory Qualifiers

U Indicates that the compound was not detected above the reported sample quantitation limit.
UJ Indicates that the compound was not detected above an approximated sample quantitation limit.
J Indicates that the value for the compound was an estimated value.
= Indicates that the compound was detected at the concentration reported.

Table 4. Groundwater Elevations

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Baseline Monitoring Event – May 1999								
D1	05/09/99	19.7	20.07	2.0 – 12.0	—	8.71	0	11.36
D2	05/09/99	19.3	19.60	2.0 – 12.0	sheen	7.17	sheen	12.43
D3	05/09/99	19.4	19.69	2.0 – 12.0	—	7.18	0	12.51
D4	05/09/99	19.4	19.66	2.0 – 12.0	—	7.08	0	12.58
D5	05/09/99	19.5	19.88	2.0 – 12.0	sheen	7.51	sheen	12.37
D6	05/09/99	19.3	19.66	2.0 – 12.0	sheen	7.23	sheen	12.43
D7	05/09/99	19.0	19.35	2.0 – 12.0	6.58	7.01	0.43	12.34
D8	05/09/99	19.3	19.60	2.0 – 12.0	6.84	7.22	0.38	12.38
D9	05/09/99	19.7	20.02	2.0 – 12.0	sheen	7.28	sheen	12.74
D10	05/09/99	19.2	19.57	2.0 – 12.0	7.12	7.13	0.01	12.44
D11	05/09/99	19.2	19.57	2.0 – 12.0	7.01	7.19	0.18	12.38
D12	05/09/99	18.8	19.14	2.0 – 12.0	6.37	6.40	0.03	12.74
D13	05/09/99	18.7	19.02	2.0 – 12.0	sheen	5.81	sheen	13.21
D14	05/09/99	19.2	19.57	2.0 – 12.0	sheen	6.41	sheen	13.16
D15	05/09/99	20.0	20.41	2.0 – 12.0	sheen	7.34	sheen	13.07
D16	05/09/99	18.8	19.13	2.0 – 12.0	6.57	6.74	0.17	12.39
D17	05/09/99	18.9	19.22	2.0 – 12.0	6.60	6.61	0.01	12.61
D18	05/09/99	18.8	19.18	2.0 – 12.0	sheen	6.48	sheen	12.70
D19	05/09/99	18.8	19.13	2.0 – 12.0	sheen	5.8	sheen	13.33
D20	05/09/99	18.5	18.90	2.0 – 12.0	sheen	6.27	sheen	12.63
D21	05/09/99	18.8	19.23	2.0 – 12.0	—	5.82	0	13.41
D22	05/09/99	19.9	20.30	2.0 – 12.0	—	7.93	0	12.37
D23	05/09/99	18.7	19.07	2.5 – 12.5	—	6.6	0	12.47
D24	05/09/99	18.5	18.84	2.5 – 12.5	sheen	6.09	sheen	12.75
MW6	05/10/99	19.6	19.40	2.9 – 12.9	—	10.19	0	9.21
MW11	05/10/99	18.4	18.09	2.3 – 12.3	—	9.81	0	8.28
MW60	05/10/99	19.9	19.70	3.0 – 13.0	—	10.99	0	8.71
MW61	05/10/99	20.0	19.73	3.0 – 13.0	—	11.60	0	8.13
MW63	05/10/99	19.7	19.55	4.0 – 14.0	—	11.03	0	8.52
MW64	05/10/99	18.4	18.18	3.0 – 13.0	—	10.20	0	7.98

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
First Sampling Event – June 1999								
D1	06/14/99	19.7	20.07	2.0 – 12.0	—	7.68	0	12.39
D2	06/14/99	19.3	19.60	2.0 – 12.0	—	7.19	0	12.41
D3	06/14/99	19.4	19.69	2.0 – 12.0	—	7.19	0	12.50
D4	06/14/99	19.4	19.66	2.0 – 12.0	—	6.47	0	13.19
D5	06/14/99	19.5	19.88	2.0 – 12.0	sheen	7.56	sheen	12.32
D6	06/14/99	19.3	19.66	2.0 – 12.0	7.15	7.85	0.70	11.81
D7	06/14/99	19.0	19.35	2.0 – 12.0	6.63	6.78	0.15	12.57
D8	06/14/99	19.3	19.60	2.0 – 12.0	sheen	6.71	sheen	12.89
D9	06/14/99	19.7	20.02	2.0 – 12.0	—	7.29	0	12.73
D10	06/14/99	19.2	19.57	2.0 – 12.0	7.15	7.22	0.07	12.35
D11	06/14/99	19.2	19.57	2.0 – 12.0	7.00	7.03	0.03	12.54
D12	06/14/99	18.8	19.14	2.0 – 12.0	—	6.24	0	12.90
D13	06/14/99	18.7	19.02	2.0 – 12.0	sheen	5.68	sheen	13.34
D14	06/14/99	19.2	19.57	2.0 – 12.0	sheen	6.34	sheen	13.23
D15	06/14/99	20.0	20.41	2.0 – 12.0	sheen	7.42	sheen	12.99
D16	06/14/99	18.8	19.13	2.0 – 12.0	6.48	6.86	0.38	12.27
D17	06/14/99	18.9	19.22	2.0 – 12.0	sheen	6.53	sheen	12.69
D18	06/14/99	18.8	19.18	2.0 – 12.0	—	6.50	0	12.68
D19	06/14/99	18.8	19.13	2.0 – 12.0	—	5.77	0	13.36
D20	06/14/99	18.5	18.90	2.0 – 12.0	—	6.27	0	12.63
D21	06/14/99	18.8	19.23	2.0 – 12.0	—	5.81	0	13.42
D22	06/14/99	19.9	20.30	2.0 – 12.0	—	7.95	0	12.35
D23	06/14/99	18.7	19.07	2.5 – 12.5	sheen	6.61	sheen	12.46
D24	06/14/99	18.5	18.84	2.5 – 12.5	sheen	6.04	sheen	12.80
MW6	06/14/99	19.6	19.40	2.9 – 12.9	—	5.95	0	13.45
MW11	06/14/99	18.4	18.09	2.3 – 12.3	—	6.72	0	11.37
MW60	06/14/99	19.9	19.70	3.0 – 13.0	—	7.52	0	12.18
MW61	06/14/99	20.0	19.73	3.0 – 13.0	—	7.47	0	12.26
MW63	06/14/99	19.7	19.55	4.0 – 14.0	—	7.55	0	12.00
MW64	06/14/99	18.4	18.18	3.0 – 13.0	—	6.06	0	12.12
P1	06/14/99	19.0	19.42	2.5 – 12.5	—	7.61	0	11.81
P2	06/14/99	20.0	20.34	2.5 – 12.5	—	8.09	0	12.25
P3	06/14/99	19.5	19.91	2.5 – 12.5	—	7.87	0	12.04
P4	06/14/99	19.4	19.79	2.0 – 12.0	—	7.61	0	12.18
P5	06/14/99	19.5	19.84	2.5 – 12.5	—	6.72	0	13.12

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Second Sampling Event – July 1999								
D1	07/06/99	19.7	20.07	2.0 – 12.0	sheen	5.77	sheen	14.30
D2	07/06/99	19.3	19.60	2.0 – 12.0	—	5.40	0	14.20
D3	07/06/99	19.4	19.69	2.0 – 12.0	—	5.54	0	14.15
D4	07/06/99	19.4	19.66	2.0 – 12.0	—	5.26	0	14.40
D5	07/06/99	19.5	19.88	2.0 – 12.0	—	5.87	0	14.01
D6	07/06/99	19.3	19.66	2.0 – 12.0	4.83	7.41	2.58	12.25
D7	07/06/99	19.0	19.35	2.0 – 12.0	sheen	4.77	sheen	14.58
D8	07/06/99	19.3	19.60	2.0 – 12.0	4.91	5.12	0.22	14.48
D9	07/06/99	19.7	20.02	2.0 – 12.0	sheen	5.61	sheen	14.41
D10	07/06/99	19.2	19.57	2.0 – 12.0	5.31	6.05	0.74	13.52
D11	07/06/99	19.2	19.57	2.0 – 12.0	4.48	7.45	2.97	12.12
D12	07/06/99	18.8	19.14	2.0 – 12.0	sheen	3.68	sheen	15.46
D13	07/06/99	18.7	19.02	2.0 – 12.0	—	3.49	0	15.53
D14	07/06/99	19.2	19.57	2.0 – 12.0	—	4.01	0	15.56
D15	07/06/99	20.0	20.41	2.0 – 12.0	4.92	5.49	0.57	14.92
D16	07/06/99	18.8	19.13	2.0 – 12.0	4.50	6.16	1.66	12.97
D17	07/06/99	18.9	19.22	2.0 – 12.0	3.60	5.54	1.94	13.68
D18	07/06/99	18.8	19.18	2.0 – 12.0	—	3.13	0	16.05
D19	07/06/99	18.8	19.13	2.0 – 12.0	—	3.35	0	15.78
D20	07/06/99	18.5	18.90	2.0 – 12.0	—	4.54	0	14.36
D21	07/06/99	18.8	19.23	2.0 – 12.0	—	3.42	0	15.81
D22	07/06/99	19.9	20.30	2.0 – 12.0	sheen	5.92	sheen	14.38
D23	07/06/99	18.7	19.07	2.5 – 12.5	—	4.94	0	14.13
D24	07/06/99	18.5	18.84	2.5 – 12.5	—	4.14	0	14.70
MW6	07/06/99	19.6	19.40	2.9 – 12.9	—	4.23	0	15.17
MW11	07/06/99	18.4	18.09	2.3 – 12.3	—	5.51	0	12.58
MW60	07/06/99	19.9	19.70	3.0 – 13.0	—	6.04	0	13.66
MW61	07/06/99	20.0	19.73	3.0 – 13.0	—	5.97	0	13.76
MW63	07/06/99	19.7	19.55	4.0 – 14.0	—	6.18	0	13.37
MW64	07/06/99	18.4	18.18	3.0 – 13.0	—	4.80	0	13.38
P1	07/06/99	19.0	19.42	2.5 – 12.5	—	6.37	0	13.05
P2	07/06/99	20.0	20.34	2.5 – 12.5	—	6.66	0	13.68
P3	07/06/99	19.5	19.91	2.5 – 12.5	—	6.56	0	13.35
P4	07/06/99	19.4	19.79	2.0 – 12.0	—	6.21	0	13.58
P5	07/06/99	19.5	19.84	2.5 – 12.5	—	4.41	0	15.43

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Third Sampling Event Event – August 1999								
D1	08/23/99	19.7	20.07	2.0 – 12.0	—	7.21	0	12.86
D2	08/23/99	19.3	19.60	2.0 – 12.0	—	6.79	0	12.81
D3	08/23/99	19.4	19.69	2.0 – 12.0	—	6.83	0	12.86
D4	08/23/99	19.4	19.66	2.0 – 12.0	—	6.92	0	12.74
D5	08/23/99	19.5	19.88	2.0 – 12.0	sheen	7.01	sheen	12.87
D6	08/23/99	19.3	19.66	2.0 – 12.0	6.63	6.79	0.16	12.87
D7	08/23/99	19.0	19.35	2.0 – 12.0	sheen	6.42	sheen	12.93
D8	08/23/99	19.3	19.60	2.0 – 12.0	—	6.46	0	13.14
D9	08/23/99	19.7	20.02	2.0 – 12.0	6.95	6.96	0.01	13.06
D10	08/23/99	19.2	19.57	2.0 – 12.0	6.50	7.30	0.8	12.27
D11	08/23/99	19.2	19.57	2.0 – 12.0	6.55	6.96	0.41	12.61
D12	08/23/99	18.8	19.14	2.0 – 12.0	—	3.99	0	15.15
D13	08/23/99	18.7	19.02	2.0 – 12.0	—	5.26	0	13.76
D14	08/23/99	19.2	19.57	2.0 – 12.0	—	5.81	0	13.76
D15	08/23/99	20.0	20.41	2.0 – 12.0	sheen	7.10	sheen	13.31
D16	08/23/99	18.8	19.13	2.0 – 12.0	5.92	7.03	1.11	12.10
D17	08/23/99	18.9	19.22	2.0 – 12.0	—	6.13	0	13.09
D18	08/23/99	18.8	19.18	2.0 – 12.0	sheen	6.18	sheen	13.00
D19	08/23/99	18.8	19.13	2.0 – 12.0	—	5.32	0	13.81
D20	08/23/99	18.5	18.90	2.0 – 12.0	—	5.88	0	13.02
D21	08/23/99	18.8	19.23	2.0 – 12.0	sheen	5.42	sheen	13.81
D22	08/23/99	19.9	20.30	2.0 – 12.0	—	7.53	0	12.77
D23	08/23/99	18.7	19.07	2.5 – 12.5	sheen	6.07	sheen	13.00
D24	08/23/99	18.5	18.84	2.5 – 12.5	sheen	5.79	sheen	13.05
MW6	08/23/99	19.6	19.40	2.9 – 12.9	—	6.00	0	13.40
MW11	08/23/99	18.4	18.09	2.3 – 12.3	—	6.37	0	11.72
MW60	08/23/99	19.9	19.70	3.0 – 13.0	—	7.09	0	12.61
MW61	08/23/99	20.0	19.73	3.0 – 13.0	—	7.14	0	12.59
MW63	08/23/99	19.7	19.55	4.0 – 14.0	—	7.09	0	12.46
MW64	08/23/99	18.4	18.18	3.0 – 13.0	—	5.66	0	12.52
P1	08/23/99	19.0	19.42	2.5 – 12.5	—	7.16	0	12.26
P2	08/23/99	20.0	20.34	2.5 – 12.5	—	7.63	0	12.71
P3	08/23/99	19.5	19.91	2.5 – 12.5	—	7.39	0	12.52
P4	08/23/99	19.4	19.79	2.0 – 12.0	—	7.07	0	12.72
P5	08/23/99	19.5	19.84	2.5 – 12.5	—	6.05	0	13.79

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Fourth Sampling Event – September 1999								
D1	09/29/99	19.7	20.07	2.0 – 12.0	—	6.23	0	13.84
D2	09/29/99	19.3	19.60	2.0 – 12.0	—	5.73	0	13.87
D3	09/29/99	19.4	19.69	2.0 – 12.0	—	5.81	0	13.88
D4	09/29/99	19.4	19.66	2.0 – 12.0	—	5.75	0	13.91
D5	09/29/99	19.5	19.88	2.0 – 12.0	—	5.88	0	14.00
D6	09/29/99	19.3	19.66	2.0 – 12.0	5.24	6.94	1.7	12.72
D7	09/29/99	19.0	19.35	2.0 – 12.0	5.26	5.53	0.27	13.82
D8	09/29/99	19.3	19.60	2.0 – 12.0	—	5.61	0	13.99
D9	09/29/99	19.7	20.02	2.0 – 12.0	sheen	5.96	sheen	14.06
D10	09/29/99	19.2	19.57	2.0 – 12.0	5.29	6.54	1.25	13.03
D11	09/29/99	19.2	19.57	2.0 – 12.0	4.91	7.24	2.33	12.33
D12	09/29/99	18.8	19.14	2.0 – 12.0	—	3.23	0	15.91
D13	09/29/99	18.7	19.02	2.0 – 12.0	—	4.13	0	14.89
D14	09/29/99	19.2	19.57	2.0 – 12.0	—	4.79	0	14.78
D15	09/29/99	20.0	20.41	2.0 – 12.0	—	6.19	0	14.22
D16	09/29/99	18.8	19.13	2.0 – 12.0	4.91	5.47	0.56	13.66
D17	09/29/99	18.9	19.22	2.0 – 12.0	4.64	6.28	1.64	12.94
D18	09/29/99	18.8	19.18	2.0 – 12.0	—	4.86	0	14.32
D19	09/29/99	18.8	19.13	2.0 – 12.0	—	4.05	0	15.08
D20	09/29/99	18.5	18.90	2.0 – 12.0	—	4.62	0	14.28
D21	09/29/99	18.8	19.23	2.0 – 12.0	—	4.32	0	14.91
D22	09/29/99	19.9	20.30	2.0 – 12.0	—	6.51	0	13.79
D23	09/29/99	18.7	19.07	2.5 – 12.5	—	5.03	0	14.04
D24	09/29/99	18.5	18.84	2.5 – 12.5	—	4.52	0	14.32
MW6	09/29/99	19.6	19.40	2.9 – 12.9	—	4.88	0	14.52
MW11	09/29/99	18.4	18.09	2.3 – 12.3	—	5.31	0	12.78
MW60	09/29/99	19.9	19.70	3.0 – 13.0	—	5.94	0	13.76
MW61	09/29/99	20.0	19.73	3.0 – 13.0	—	5.95	0	13.78
MW63	09/29/99	19.7	19.55	4.0 – 14.0	—	6.04	0	13.51
MW64	09/29/99	18.4	18.18	3.0 – 13.0	—	4.52	0	13.66
P1	09/29/99	19.0	19.42	2.5 – 12.5	—	6.13	0	13.29
P2	09/29/99	20.0	20.34	2.5 – 12.5	—	6.60	0	13.74
P3	09/29/99	19.5	19.91	2.5 – 12.5	—	6.37	0	13.54
P4	09/29/99	19.4	19.79	2.0 – 12.0	—	6.01	0	13.78
P5	09/29/99	19.5	19.84	2.5 – 12.5	—	5.16	0	14.68

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Fifth Sampling Event – October 1999								
D1	10/27/99	19.7	20.07	2.0 – 12.0	—	6.92	0	13.15
D2	10/27/99	19.3	19.60	2.0 – 12.0	—	6.49	0	13.11
D3	10/27/99	19.4	19.69	2.0 – 12.0	—	6.44	0	13.25
D4	10/27/99	19.4	19.66	2.0 – 12.0	—	6.36	0	13.30
D5	10/27/99	19.5	19.88	2.0 – 12.0	—	6.81	0	13.07
D6	10/27/99	19.3	19.66	2.0 – 12.0	6.33	7.48	1.15	12.18
D7	10/27/99	19.0	19.35	2.0 – 12.0	5.82	6.20	0.38	13.15
D8	10/27/99	19.3	19.60	2.0 – 12.0	6.07	6.52	0.45	13.08
D9	10/27/99	19.7	20.02	2.0 – 12.0	—	6.56	0	13.46
D10	10/27/99	19.2	19.57	2.0 – 12.0	6.06	7.80	1.74	11.77
D11	10/27/99	19.2	19.57	2.0 – 12.0	6.05	7.04	0.99	12.53
D12	10/27/99	18.8	19.14	2.0 – 12.0	—	4.54	0	14.60
D13	10/27/99	18.7	19.02	2.0 – 12.0	—	4.64	0	14.38
D14	10/27/99	19.2	19.57	2.0 – 12.0	—	5.07	0	14.50
D15	10/27/99	20.0	20.41	2.0 – 12.0	6.31	6.77	0.46	13.64
D16	10/27/99	18.8	19.13	2.0 – 12.0	5.51	7.22	1.71	11.91
D17	10/27/99	18.9	19.22	2.0 – 12.0	5.74	6.22	0.48	13.00
D18	10/27/99	18.8	19.18	2.0 – 12.0	—	5.45	0	13.73
D19	10/27/99	18.8	19.13	2.0 – 12.0	—	4.45	0	14.68
D20	10/27/99	18.5	18.90	2.0 – 12.0	—	5.51	0	13.39
D21	10/27/99	18.8	19.23	2.0 – 12.0	—	4.61	0	14.62
D22	10/27/99	19.9	20.30	2.0 – 12.0	—	7.2	0	13.10
D23	10/27/99	18.7	19.07	2.5 – 12.5	—	5.89	0	13.18
D24	10/27/99	18.5	18.84	2.5 – 12.5	—	5.32	0	13.52
MW6	10/27/99	19.6	19.4	2.9 – 12.9	—	4.90	0	14.50
MW11	10/27/99	18.4	18.09	2.3 – 12.3	—	6.11	0	11.98
MW60	10/27/99	19.9	19.70	3.0 – 13.0	—	6.65	0	13.05
MW61	10/27/99	20.0	19.73	3.0 – 13.0	—	6.41	0	13.32
MW63	10/27/99	19.7	19.55	4.0 – 14.0	—	6.78	0	12.77
MW64	10/27/99	18.4	18.18	3.0 – 13.0	—	5.34	0	12.84
P1	10/27/99	19.0	19.42	2.5 – 12.5	—	7.00	0	12.42
P2	10/27/99	20.0	20.34	2.5 – 12.5	—	7.30	0	13.04
P3	10/27/99	19.5	19.91	2.5 – 12.5	—	7.24	0	12.67
P4	10/27/99	19.4	19.79	2.0 – 12.0	—	6.86	0	12.93
P5	10/27/99	19.5	19.84	2.5 – 12.5	—	5.22	0	14.62

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Sixth Sampling Event – December 1999								
D1	12/01/99	19.7	20.07	2.0 – 12.0	—	8.01	0	12.06
D2	12/01/99	19.3	19.60	2.0 – 12.0	—	7.52	0	12.08
D3	12/01/99	19.4	19.69	2.0 – 12.0	—	7.46	0	12.23
D4	12/01/99	19.4	19.66	2.0 – 12.0	—	7.38	0	12.28
D5	12/01/99	19.5	19.88	2.0 – 12.0	—	7.92	0	11.96
D6	12/01/99	19.3	19.66	2.0 – 12.0	7.45	8.21	0.76	11.45
D7	12/01/99	19.0	19.35	2.0 – 12.0	—	7.07	0	12.28
D8	12/01/99	19.3	19.60	2.0 – 12.0	—	7.27	0	12.33
D9	12/01/99	19.7	20.02	2.0 – 12.0	7.52	7.56	0.04	12.46
D10	12/01/99	19.2	19.57	2.0 – 12.0	7.04	7.60	0.56	11.97
D11	12/01/99	19.2	19.57	2.0 – 12.0	7.19	7.58	0.39	11.99
D12	12/01/99	18.8	19.14	2.0 – 12.0	—	6.59	0	12.55
D13	12/01/99	18.7	19.02	2.0 – 12.0	—	6.01	0	13.01
D14	12/01/99	19.2	19.57	2.0 – 12.0	—	6.71	0	12.86
D15	12/01/99	20.0	20.41	2.0 – 12.0	7.54	7.71	0.17	12.70
D16	12/01/99	18.8	19.13	2.0 – 12.0	6.51	8.08	1.57	11.05
D17	12/01/99	18.9	19.22	2.0 – 12.0	6.71	6.91	0.20	12.31
D18	12/01/99	18.8	19.18	2.0 – 12.0	—	6.71	0	12.47
D19	12/01/99	18.8	19.13	2.0 – 12.0	—	5.88	0	13.25
D20	12/01/99	18.5	18.90	2.0 – 12.0	—	6.41	0	12.49
D21	12/01/99	18.8	19.23	2.0 – 12.0	—	5.96	0	13.27
D22	12/01/99	19.9	20.30	2.0 – 12.0	—	8.19	0	12.11
D23	12/01/99	18.7	19.07	2.5 – 12.5	—	6.87	0	12.20
D24	12/01/99	18.5	18.84	2.5 – 12.5	—	6.35	0	12.49
MW6	12/01/99	19.6	19.40	2.9 – 12.9	—	7.95	0	11.45
MW11	12/01/99	18.4	18.09	2.3 – 12.3	—	7.01	0	11.08
MW60	12/01/99	19.9	19.70	3.0 – 13.0	—	7.79	0	11.91
MW61	12/01/99	20.0	19.73	3.0 – 13.0	—	7.89	0	11.84
MW63	12/01/99	19.7	19.55	4.0 – 14.0	—	7.71	0	11.84
MW64	12/01/99	18.4	18.18	3.0 – 13.0	—	6.24	0	11.94
P1	12/01/99	19.0	19.42	2.5 – 12.5	—	7.87	0	11.55
P2	12/01/99	20.0	20.34	2.5 – 12.5	—	8.35	0	11.99
P3	12/01/99	19.5	19.91	2.5 – 12.5	—	8.15	0	11.76
P4	12/01/99	19.4	19.79	2.0 – 12.0	—	7.87	0	11.92
P5	12/01/99	19.5	19.84	2.5 – 12.5	—	6.73	0	13.11

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Seventh Sampling Event – January 2000								
D1	01/04/00	19.7	20.07	2.0 – 12.0	—	7.89	0	12.18
D2	01/04/00	19.3	19.60	2.0 – 12.0	—	7.38	0	12.22
D3	01/04/00	19.4	19.69	2.0 – 12.0	—	7.35	0	12.34
D4	01/04/00	19.4	19.66	2.0 – 12.0	—	7.24	0	12.42
D5	01/04/00	19.5	19.88	2.0 – 12.0	—	7.71	0	12.17
D6	01/04/00	19.3	19.66	2.0 – 12.0	7.32	7.78	0.46	11.88
D7	01/04/00	19.0	19.35	2.0 – 12.0	—	6.9	0	12.45
D8	01/04/00	19.3	19.60	2.0 – 12.0	7.11	7.12	0.01	12.48
D9	01/04/00	19.7	20.02	2.0 – 12.0	—	7.45	0	12.57
D10	01/04/00	19.2	19.57	2.0 – 12.0	7.21	7.67	0.46	11.90
D11	01/04/00	19.2	19.57	2.0 – 12.0	7.18	7.42	0.24	12.15
D12	01/04/00	18.8	19.14	2.0 – 12.0	—	6.4	0	12.74
D13	01/04/00	18.7	19.02	2.0 – 12.0	—	6.05	0	12.97
D14	01/04/00	19.2	19.57	2.0 – 12.0	—	6.72	0	12.85
D15	01/04/00	20.0	20.41	2.0 – 12.0	—	7.57	0	12.84
D16	01/04/00	18.8	19.13	2.0 – 12.0	6.70	7.23	0.53	11.90
D17	01/04/00	18.9	19.22	2.0 – 12.0	6.45	6.87	0.42	12.35
D18	01/04/00	18.8	19.18	2.0 – 12.0	—	6.67	0	12.51
D19	01/04/00	18.8	19.13	2.0 – 12.0	—	5.94	0	13.19
D20	01/04/00	18.5	18.90	2.0 – 12.0	—	6.45	0	12.45
D21	01/04/00	18.8	19.23	2.0 – 12.0	—	6.03	0	13.20
D22	01/04/00	19.9	20.30	2.0 – 12.0	—	8.12	0	12.18
D23	01/04/00	18.7	19.07	2.5 – 12.5	—	6.79	0	12.28
D24	01/04/00	18.5	18.84	2.5 – 12.5	sheen	6.30	sheen	12.54
MW6	01/04/00	19.6	19.40	2.9 – 12.9	—	6.03	0	13.37
MW11	01/04/00	18.4	18.09	2.3 – 12.3		below pump		below pump
MW60	01/04/00	19.9	19.70	3.0 – 13.0	—	7.57	0	12.13
MW61	01/04/00	20.0	19.73	3.0 – 13.0	—	7.54	0	12.19
MW63	01/04/00	19.7	19.55	4.0 – 14.0	—	7.67	0	11.88
MW64	01/04/00	18.4	18.18	3.0 – 13.0	—	6.29	0	11.89
P1	01/04/00	19.0	19.42	2.5 – 12.5	—	7.84	0	11.58
P2	01/04/00	20.0	20.34	2.5 – 12.5	—	8.24	0	12.10
P3	01/04/00	19.5	19.91	2.5 – 12.5	—	8.08	0	11.83
P4	01/04/00	19.4	19.79	2.0 – 12.0	—	7.72	0	12.07
P5	01/04/00	19.5	19.84	2.5 – 12.5	—	6.83	0	13.01

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Eighth Sampling Event – March 2000								
D1	03/27/00	19.7	20.07	2.0 – 12.0	—	6.97	0	13.10
D2	03/27/00	19.3	19.60	2.0 – 12.0	—	6.67	0	12.93
D3	03/27/00	19.4	19.69	2.0 – 12.0	—	6.76	0	12.93
D4	03/27/00	19.4	19.66	2.0 – 12.0	—	6.82	0	12.84
D5	03/27/00	19.5	19.88	2.0 – 12.0	—	7.02	0	12.86
D6	03/27/00	19.3	19.66	2.0 – 12.0	6.49	7.59	1.10	12.07
D7	03/27/00	19.0	19.35	2.0 – 12.0	—	6.80	0	12.55
D8	03/27/00	19.3	19.60	2.0 – 12.0	—	6.85	0	12.75
D9	03/27/00	19.7	20.02	2.0 – 12.0	—	6.90	0	13.12
D10	03/27/00	19.2	19.57	2.0 – 12.0	6.38	7.79	1.41	11.78
D11	03/27/00	19.2	19.57	2.0 – 12.0	6.56	6.72	0.16	12.85
D12	03/27/00	18.8	19.14	2.0 – 12.0	—	3.58	0	15.56
D13	03/27/00	18.7	19.02	2.0 – 12.0	—	5.34	0	13.68
D14	03/27/00	19.2	19.57	2.0 – 12.0	—	6.28	0	13.29
D15	03/27/00	20.0	20.41	2.0 – 12.0	—	6.79	0	13.62
D16	03/27/00	18.8	19.13	2.0 – 12.0	—	6.15	0	12.98
D17	03/27/00	18.9	19.22	2.0 – 12.0	—	6.12	0	13.10
D18	03/27/00	18.8	19.18	2.0 – 12.0	—	5.70	0	13.48
D19	03/27/00	18.8	19.13	2.0 – 12.0	—	4.49	0	14.64
D20	03/27/00	18.5	18.90	2.0 – 12.0	—	5.76	0	13.14
D21	03/27/00	18.8	19.23	2.0 – 12.0	—	5.01	0	14.22
D22	03/27/00	19.9	20.30	2.0 – 12.0	—	7.39	0	12.91
D23	03/27/00	18.7	19.07	2.5 – 12.5	—	6.14	0	12.93
D24	03/27/00	18.5	18.84	2.5 – 12.5	5.45	6.28	0.83	12.56
MW6	03/27/00	19.6	19.40	2.9 – 12.9	—	5.23	0	14.17
MW11	03/27/00	18.4	18.09	2.3 – 12.3	—	6.51	0	11.58
MW60	03/27/00	19.9	19.70	3.0 – 13.0	—	7.01	0	12.69
MW61	03/27/00	20.0	19.73	3.0 – 13.0	—	6.87	0	12.86
MW63	03/27/00	19.7	19.55	4.0 – 14.0	—	7.17	0	12.38
MW64	03/27/00	18.4	18.18	3.0 – 13.0	NM	NM	NM	NM
P1	03/27/00	19.0	19.42	2.5 – 12.5	—	7.19	0	12.23
P2	03/27/00	20.0	20.34	2.5 – 12.5	—	7.54	0	12.80
P3	03/27/00	19.5	19.91	2.5 – 12.5	—	7.4	0	12.51
P4	03/27/00	19.4	19.79	2.0 – 12.0	—	7.07	0	12.72
P5	03/27/00	19.5	19.84	2.5 – 12.5	—	5.81	0	14.03

NOTES:

BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level
NM Not measured

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Ninth Sampling Event – May 2000								
D1	05/22/00	19.7	20.07	2.0 – 12.0	—	7.87	0	12.20
D2	05/22/00	19.3	19.60	2.0 – 12.0	—	7.35	0	12.25
D3	05/22/00	19.4	19.69	2.0 – 12.0	—	7.35	0	12.34
D4	05/22/00	19.4	19.66	2.0 – 12.0	—	7.25	0	12.41
D5	05/22/00	19.5	19.88	2.0 – 12.0	—	7.69	0	12.19
D6	05/22/00	19.3	19.66	2.0 – 12.0	—	7.41	0	12.25
D7	05/22/00	19.0	19.35	2.0 – 12.0	—	6.79	0	12.56
D8	05/22/00	19.3	19.60	2.0 – 12.0	—	7.11	0	12.49
D9	05/22/00	19.7	20.02	2.0 – 12.0	—	7.51	0	12.51
D10	05/22/00	19.2	19.57	2.0 – 12.0	7.28	7.45	0.17	12.12
D11	05/22/00	19.2	19.57	2.0 – 12.0	—	7.22	0	12.35
D12	05/22/00	18.8	19.14	2.0 – 12.0	—	5.57	0	13.57
D13	05/22/00	18.7	19.02	2.0 – 12.0	—	5.00	0	14.02
D14	05/22/00	19.2	19.57	2.0 – 12.0	—	6.52	0	13.05
D15	05/22/00	20.0	20.41	2.0 – 12.0	—	7.46	0	12.95
D16	05/22/00	18.8	19.13	2.0 – 12.0	—	6.78	0	12.35
D17	05/22/00	18.9	19.22	2.0 – 12.0	—	6.78	0	12.44
D18	05/22/00	18.8	19.18	2.0 – 12.0	6.61	6.62	0.01	12.56
D19	05/22/00	18.8	19.13	2.0 – 12.0	—	5.85	0	13.28
D20	05/22/00	18.5	18.90	2.0 – 12.0	—	6.46	0	12.44
D21	05/22/00	18.8	19.23	2.0 – 12.0	—	5.93	0	13.30
D22	05/22/00	19.9	20.30	2.0 – 12.0	—	8.10	0	12.20
D23	05/22/00	18.7	19.07	2.5 – 12.5	—	6.78	0	12.29
D24	05/22/00	18.5	18.84	2.5 – 12.5	—	6.30	0	12.54
MW6	05/22/00	19.6	19.4	2.9 – 12.9	—	5.83	0	13.57
MW11	05/22/00	18.4	18.09	2.3 – 12.3	—	6.96	0	11.13
MW60	05/22/00	19.9	19.70	3.0 – 13.0	—	7.63	0	12.07
MW61	05/22/00	20.0	19.73	3.0 – 13.0	—	7.54	0	12.19
MW63	05/22/00	19.7	19.55	4.0 – 14.0	—	7.73	0	11.82
MW64	05/22/00	18.4	18.18	3.0 – 13.0	NM	NM	NM	NM
P1	05/22/00	19.0	19.42	2.5 – 12.5	—	7.73	0	11.69
P2	05/22/00	20.0	20.34	2.5 – 12.5	—	8.19	0	12.15
P3	05/22/00	19.5	19.91	2.5 – 12.5	—	8.01	0	11.90
P4	05/22/00	19.4	19.79	2.0 – 12.0	—	7.68	0	12.11
P5	05/22/00	19.5	19.84	2.5 – 12.5	—	6.69	0	13.15

NOTE:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level
NM Not measured

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Tenth Sampling Event – July 2000								
D1	07/19/00	19.7	20.07	2.0 – 12.0	—	8.17	0	11.90
D2	07/19/00	19.3	19.60	2.0 – 12.0	—	7.68	0	11.92
D3	07/19/00	19.4	19.69	2.0 – 12.0	—	7.76	0	11.93
D4	07/19/00	19.4	19.66	2.0 – 12.0	—	7.84	0	11.82
D5	07/19/00	19.5	19.88	2.0 – 12.0	—	7.73	0	12.15
D6	07/19/00	19.3	19.66	2.0 – 12.0	—	7.79	0	11.87
D7	07/19/00	19.0	19.35	2.0 – 12.0	—	7.19	0	12.16
D8	07/19/00	19.3	19.60	2.0 – 12.0	—	7.61	0	11.99
D9	07/19/00	19.7	20.02	2.0 – 12.0	—	7.79	0	12.23
D10	07/19/00	19.2	19.57	2.0 – 12.0	7.58	7.85	0.27	11.72
D11	07/19/00	19.2	19.57	2.0 – 12.0	7.49	7.55	0.06	12.02
D12	07/19/00	18.8	19.14	2.0 – 12.0	—	6.67	0	12.47
D13	07/19/00	18.7	19.02	2.0 – 12.0	—	6.22	0	12.80
D14	07/19/00	19.2	19.57	2.0 – 12.0	—	7.10	0	12.47
D15	07/19/00	20.0	20.41	2.0 – 12.0	—	7.80	0	12.61
D16	07/19/00	18.8	19.13	2.0 – 12.0	—	7.06	0	12.07
D17	07/19/00	18.9	19.22	2.0 – 12.0	—	7.07	0	12.15
D18	07/19/00	18.8	19.18	2.0 – 12.0	—	7.28	0	11.90
D19	07/19/00	18.8	19.13	2.0 – 12.0	—	6.09	0	13.04
D20	07/19/00	18.5	18.90	2.0 – 12.0	—	6.74	0	12.16
D21	07/19/00	18.8	19.23	2.0 – 12.0	—	6.10	0	13.13
D22	07/19/00	19.9	20.30	2.0 – 12.0	—	8.41	0	11.89
D23	07/19/00	18.7	19.07	2.5 – 12.5	—	7.02	0	12.05
D24	07/19/00	18.5	18.84	2.5 – 12.5	—	6.57	0	12.27
MW6	07/19/00	19.6	19.4	2.9 – 12.9	NM	NM	NM	NM
MW11	07/19/00	18.4	18.09	2.3 – 12.3		below pump		below pump
MW60	07/19/00	19.9	19.70	3.0 – 13.0	—	7.85	0	11.85
MW61	07/19/00	20.0	19.73	3.0 – 13.0	—	7.88	0	11.85
MW63	07/19/00	19.7	19.55	4.0 – 14.0		below pump		below pump
MW64	07/19/00	18.4	18.18	3.0 – 13.0	—	6.53	0	11.65
P1	07/19/00	19.0	19.42	2.5 – 12.5	—	8.03	0	11.39
P2	07/19/00	20.0	20.34	2.5 – 12.5	—	8.50	0	11.84
P3	07/19/00	19.5	19.91	2.5 – 12.5	—	8.35	0	11.56
P4	07/19/00	19.4	19.79	2.0 – 12.0	—	7.87	0	11.92
P5	07/19/00	19.5	19.84	2.5 – 12.5	—	7.03	0	12.81
MW8	07/25/00	19.0	18.58	3.5 – 13.5	—	8.91	0	9.67
MW8A	07/25/00	19.0	18.67	4.0 – 14.0	—	9.76	0	8.91
MW59	07/25/00	18.8	18.61	2.0 – 12.0	9.20	9.28	0.08	9.33
PR-1	07/25/00	18.9	18.64	3.6 – 13.6	—	8.04	0	10.6
PR-2	07/25/00	18.9	18.54	4.0 – 14.0	8.57	8.58	0.01	9.96
PR-3	07/25/00	18.9	18.68	2.0 – 17.0	—	8.37	0	10.31
PR-4	07/25/00	19.1	19.01	2.0 – 17.0	—	8.82	0	10.19
PR-5	07/25/00	19.4	19.11	2.0 – 17.0	—	9.08	0	10.03

NOTES:

BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level
NM Not measured

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Eleventh Sampling Event – September 2000								
D1	09/25/00	19.7	20.07	2.0 – 12.0	—	6.47	0	13.60
D2	09/25/00	19.3	19.60	2.0 – 12.0	—	5.94	0	13.66
D3	09/25/00	19.4	19.69	2.0 – 12.0	—	5.93	0	13.76
D4	09/25/00	19.4	19.66	2.0 – 12.0	—	5.89	0	13.77
D5	09/25/00	19.5	19.88	2.0 – 12.0	—	6.29	0	13.59
D6	09/25/00	19.3	19.66	2.0 – 12.0	—	6.00	0	13.66
D7	09/25/00	19.0	19.35	2.0 – 12.0	—	5.38	0	13.97
D8	09/25/00	19.3	19.60	2.0 – 12.0	—	5.63	0	13.97
D9	09/25/00	19.7	20.02	2.0 – 12.0	—	6.06	0	13.96
D10	09/25/00	19.2	19.57	2.0 – 12.0	5.71	6.42	0.71	13.15
D11	09/25/00	19.2	19.57	2.0 – 12.0	5.34	6.96	1.62	12.61
D12	09/25/00	18.8	19.14	2.0 – 12.0	—	3.03	0	16.11
D13	09/25/00	18.7	19.02	2.0 – 12.0	—	3.95	0	15.07
D14	09/25/00	19.2	19.57	2.0 – 12.0	—	4.71	0	14.86
D15	09/25/00	20.0	20.41	2.0 – 12.0	—	6.01	0	14.40
D16	09/25/00	18.8	19.13	2.0 – 12.0	—	5.29	0	13.84
D17	09/25/00	18.9	19.22	2.0 – 12.0	5.23	5.24	0.01	13.98
D18	09/25/00	18.8	19.18	2.0 – 12.0	—	4.78	0	14.40
D19	09/25/00	18.8	19.13	2.0 – 12.0	—	3.97	0	15.16
D20	09/25/00	18.5	18.90	2.0 – 12.0	—	4.93	0	13.97
D21	09/25/00	18.8	19.23	2.0 – 12.0	—	4.17	0	15.06
D22	09/25/00	19.9	20.30	2.0 – 12.0	—	6.74	0	13.56
D23	09/25/00	18.7	19.07	2.5 – 12.5	—	5.32	0	13.75
D24	09/25/00	18.5	18.84	2.5 – 12.5	—	4.74	0	14.10
MW6	09/25/00	19.6	19.4	2.9 – 12.9	—	4.78	0	14.62
MW11	09/25/00	18.4	18.09	2.3 – 12.3	—	5.82	0	12.27
MW60	09/25/00	19.9	19.70	3.0 – 13.0	—	6.16	0	13.54
MW61	09/25/00	20.0	19.73	3.0 – 13.0	—	6.16	0	13.57
MW63	09/25/00	19.7	19.55	4.0 – 14.0	—	6.33	0	13.22
MW64	09/25/00	18.4	18.18	3.0 – 13.0	NM	NM	NM	NM
P1	09/25/00	19.0	19.42	2.5 – 12.5	—	6.56	0	12.86
P2	09/25/00	20.0	20.34	2.5 – 12.5	—	6.83	0	13.51
P3	09/25/00	19.5	19.91	2.5 – 12.5	—	6.69	0	13.22
P4	09/25/00	19.4	19.79	2.0 – 12.0	—	6.29	0	13.50
P5	09/25/00	19.5	19.84	2.5 – 12.5	—	5.02	0	14.82

NOTES:

BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level
NM Not measured

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Twelfth Sampling Event – November/December 2000								
D1	11/28/00	19.7	20.07	2.0 – 12.0	—	8.24	0	11.83
D2	11/28/00	19.3	19.60	2.0 – 12.0	—	7.69	0	11.91
D3	11/28/00	19.4	19.69	2.0 – 12.0	—	7.70	0	11.99
D4	11/28/00	19.4	19.66	2.0 – 12.0	—	7.60	0	12.06
D5	11/28/00	19.5	19.88	2.0 – 12.0	—	8.03	0	11.85
D6	11/28/00	19.3	19.66	2.0 – 12.0	—	7.77	0	11.89
D7	11/28/00	19.0	19.35	2.0 – 12.0	—	7.24	0	12.11
D8	11/28/00	19.3	19.60	2.0 – 12.0	—	7.47	0	12.13
D9	11/28/00	19.7	20.02	2.0 – 12.0	—	7.81	0	12.21
D10	11/28/00	19.2	19.57	2.0 – 12.0	7.64	7.69	0.05	11.88
D11	11/28/00	19.2	19.57	2.0 – 12.0	—	7.55	0	12.02
D12	11/28/00	18.8	19.14	2.0 – 12.0	—	6.82	0	12.32
D13	11/28/00	18.7	19.02	2.0 – 12.0	—	5.38	0	13.64
D14	11/28/00	19.2	19.57	2.0 – 12.0	—	6.97	0	12.60
D15	11/28/00	20.0	20.41	2.0 – 12.0	—	7.9	0	12.51
D16	11/28/00	18.8	19.13	2.0 – 12.0	—	7.11	0	12.02
D17	11/28/00	18.9	19.22	2.0 – 12.0	—	7.09	0	12.13
D18	11/28/00	18.8	19.18	2.0 – 12.0	—	7.04	0	12.14
D19	11/28/00	18.8	19.13	2.0 – 12.0	—	6.43	0	12.70
D20	11/28/00	18.5	18.90	2.0 – 12.0	—	6.80	0	12.10
D21	11/28/00	18.8	19.23	2.0 – 12.0	—	6.49	0	12.74
D22	11/28/00	19.9	20.30	2.0 – 12.0	—	8.46	0	11.84
D23	11/28/00	18.7	19.07	2.5 – 12.5	—	7.15	0	11.92
D24	11/28/00	18.5	18.84	2.5 – 12.5	—	6.60	0	12.24
MW6	11/28/00	19.6	19.4	2.9 – 12.9	—	5.42	0	13.98
MW11	11/28/00	18.4	18.09	2.3 – 12.3	—	7.23	0	10.86
MW60	11/28/00	19.9	19.70	3.0 – 13.0	—	7.93	0	11.77
MW61	11/28/00	20.0	19.73	3.0 – 13.0	—	7.88	0	11.85
MW63	11/28/00	19.7	19.55	4.0 – 14.0	—	8.02	0	11.53
MW64	11/28/00	18.4	18.18	3.0 – 13.0	—	6.61	0	11.57
P1	11/28/00	19.0	19.42	2.5 – 12.5	—	8.17	0	11.25
P2	11/28/00	20.0	20.34	2.5 – 12.5	—	8.60	0	11.74
P3	11/28/00	19.5	19.91	2.5 – 12.5	—	8.41	0	11.50
P4	11/28/00	19.4	19.79	2.0 – 12.0	—	8.06	0	11.73
P5	11/28/00	19.5	19.84	2.5 – 12.5	—	7.28	0	12.56

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Thirteenth Sampling Event – February 2001								
D1	02/01/01	19.7	20.07	2.0 – 12.0	—	8.19	0	11.88
D2	02/01/01	19.3	19.60	2.0 – 12.0	—	7.95	0	11.65
D3	02/01/01	19.4	19.69	2.0 – 12.0	7.79	7.84	0.05	11.85
D4	02/01/01	19.4	19.66	2.0 – 12.0	—	7.48	0	12.18
D5	02/01/01	19.5	19.88	2.0 – 12.0	—	7.94	0	11.94
D6	02/01/01	19.3	19.66	2.0 – 12.0	7.95	7.96	0.01	11.70
D7	02/01/01	19.0	19.35	2.0 – 12.0	—	8.13	0	11.22
D8	02/01/01	19.3	19.60	2.0 – 12.0	—	7.49	0	12.11
D9	02/01/01	19.7	20.02	2.0 – 12.0	—	7.49	0	12.53
D10	02/01/01	19.2	19.57	2.0 – 12.0	7.48	8.09	0.61	11.48
D11	02/01/01	19.2	19.57	2.0 – 12.0	7.60	8.51	0.91	11.06
D12	02/01/01	18.8	19.14	2.0 – 12.0	—	5.61	0	13.53
D13	02/01/01	18.7	19.02	2.0 – 12.0	—	6.98	0	12.04
D14	02/01/01	19.2	19.57	2.0 – 12.0	—	6.78	0	12.79
D15	02/01/01	20.0	20.41	2.0 – 12.0	—	7.23	0	13.18
D16	02/01/01	18.8	19.13	2.0 – 12.0	—	7.20	0	11.93
D17	02/01/01	18.9	19.22	2.0 – 12.0	—	7.31	0	11.91
D18	02/01/01	18.8	19.18	2.0 – 12.0	—	7.13	0	12.05
D19	02/01/01	18.8	19.13	2.0 – 12.0	—	5.88	0	13.25
D20	02/01/01	18.5	18.90	2.0 – 12.0	—	6.70	0	12.20
D21	02/01/01	18.8	19.23	2.0 – 12.0	—	5.71	0	13.52
D22	02/01/01	19.9	20.30	2.0 – 12.0	—	8.33	0	11.97
D23	02/01/01	18.7	19.07	2.5 – 12.5	—	7.00	0	12.07
D24	02/01/01	18.5	18.84	2.5 – 12.5	—	6.71	0	12.13
MW6	02/01/01	19.6	19.4	2.9 – 12.9	—	5.92	0	13.48
MW11	02/01/01	18.4	18.09	2.3 – 12.3	—	6.95	0	11.14
MW60	02/01/01	19.9	19.70	3.0 – 13.0		below pump		below pump
MW61	02/01/01	20.0	19.73	3.0 – 13.0	—	7.82	0	11.91
MW63	02/01/01	19.7	19.55	4.0 – 14.0	—	7.77	0	11.78
MW64	02/01/01	18.4	18.18	3.0 – 13.0	—	6.32	0	11.86
P1	02/01/01	19.0	19.42	2.5 – 12.5	—	7.83	0	11.59
P2	02/01/01	20.0	20.34	2.5 – 12.5	—	8.40	0	11.94
P3	02/01/01	19.5	19.91	2.5 – 12.5	—	8.12	0	11.79
P4	02/01/01	19.4	19.79	2.0 – 12.0	—	7.84	0	11.95
P5	02/01/01	19.5	19.84	2.5 – 12.5	—	6.59	0	13.25

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Fourteenth Sampling Event – April 2001								
D1	04/07/01	19.7	20.07	2.0 – 12.0	—	7.94	0	12.13
D2	04/07/01	19.3	19.60	2.0 – 12.0	—	7.71	0	11.89
D3	04/07/01	19.4	19.69	2.0 – 12.0	—	7.37	0	12.32
D4	04/07/01	19.4	19.66	2.0 – 12.0	—	7.09	0	12.57
D5	04/07/01	19.5	19.88	2.0 – 12.0	—	7.67	0	12.21
D6	04/07/01	19.3	19.66	2.0 – 12.0	—	7.78	0	11.88
D7	04/07/01	19.0	19.35	2.0 – 12.0	—	7.44	0	11.91
D8	04/07/01	19.3	19.60	2.0 – 12.0	—	6.91	0	12.69
D9	04/07/01	19.7	20.02	2.0 – 12.0	—	7.16	0	12.86
D10	04/07/01	19.2	19.57	2.0 – 12.0	—	7.43	0	12.14
D11	04/07/01	19.2	19.57	2.0 – 12.0	7.48	8.32	0.84	11.25
D12	04/07/01	18.8	19.14	2.0 – 12.0	—	5.73	0	13.41
D13	04/07/01	18.7	19.02	2.0 – 12.0	—	5.81	0	13.21
D14	04/07/01	19.2	19.57	2.0 – 12.0	—	6.03	0	13.54
D15	04/07/01	20.0	20.41	2.0 – 12.0	—	6.82	0	13.59
D16	04/07/01	18.8	19.13	2.0 – 12.0	—	6.44	0	12.69
D17	04/07/01	18.9	19.22	2.0 – 12.0	—	7.33	0	11.89
D18	04/07/01	18.8	19.18	2.0 – 12.0	—	6.24	0	12.94
D19	04/07/01	18.8	19.13	2.0 – 12.0	—	5.64	0	13.49
D20	04/07/01	18.5	18.90	2.0 – 12.0	—	6.29	0	12.61
D21	04/07/01	18.8	19.23	2.0 – 12.0	—	5.35	0	13.88
D22	04/07/01	19.9	20.30	2.0 – 12.0	NM	NM	NM	NM
D23	04/07/01	18.7	19.07	2.5 – 12.5	—	6.63	0	12.44
D24	04/07/01	18.5	18.84	2.5 – 12.5	—	6.51	0	12.33
MW6	04/07/01	19.6	19.4	2.9 – 12.9	NM	NM	NM	NM
MW11	04/07/01	18.4	18.09	2.3 – 12.3	—	6.8	0	11.29
MW60	04/07/01	19.9	19.70	3.0 – 13.0	—	7.47	0	12.23
MW61	04/07/01	20.0	19.73	3.0 – 13.0	—	7.39	0	12.34
MW63	04/07/01	19.7	19.55	4.0 – 14.0	—	7.44	0	12.11
MW64	04/07/01	18.4	18.18	3.0 – 13.0	—	5.95	0	12.23
P1	04/07/01	19.0	19.42	2.5 – 12.5	—	7.59	0	11.83
P2	04/07/01	20.0	20.34	2.5 – 12.5	—	8.06	0	12.28
P3	04/07/01	19.5	19.91	2.5 – 12.5	—	7.82	0	12.09
P4	04/07/01	19.4	19.79	2.0 – 12.0	—	7.53	0	12.26
P5	04/07/01	19.5	19.84	2.5 – 12.5	—	6.10	0	13.74

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level
NM Not measured

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Fifteenth Sampling Event – June 2001								
D1	06/08/01	19.7	20.07	2.0 – 12.0	—	8.26	0	11.81
D2	06/08/01	19.3	19.60	2.0 – 12.0	—	7.71	0	11.89
D3/PR-6	06/08/01	19.4	19.13	2.5 – 12.5		below pump		below pump
D4	06/08/01	19.4	19.66	2.0 – 12.0	—	7.61	0	12.05
D5	06/08/01	19.5	19.88	2.0 – 12.0	—	8.04	0	11.84
D6	06/08/01	19.3	19.66	2.0 – 12.0	—	7.76	0	11.90
D7	06/08/01	19.0	19.35	2.0 – 12.0	—	7.15	0	12.20
D8	06/08/01	19.3	19.60	2.0 – 12.0	—	7.48	0	12.12
D9	06/08/01	19.7	20.02	2.0 – 12.0	—	7.82	0	12.20
D10	06/08/01	19.2	19.57	2.0 – 12.0	—	7.64	0	11.93
D11	06/08/01	19.2	19.57	2.0 – 12.0	—	7.55	0	12.02
D12	06/08/01	18.8	19.14	2.0 – 12.0	—	6.99	0	12.15
D13	06/08/01	18.7	19.02	2.0 – 12.0	—	6.41	0	12.61
D14	06/08/01	19.2	19.57	2.0 – 12.0	—	6.87	0	12.70
D15	06/08/01	20.0	20.41	2.0 – 12.0	—	7.79	0	12.62
D16	06/08/01	18.8	19.13	2.0 – 12.0	—	7.08	0	12.05
D17	06/08/01	18.9	19.22	2.0 – 12.0	—	7.10	0	12.12
D18	06/08/01	18.8	19.18	2.0 – 12.0	—	7.00	0	12.18
D19	06/08/01	18.8	19.13	2.0 – 12.0	—	6.29	0	12.84
D20	06/08/01	18.5	18.90	2.0 – 12.0	—	6.78	0	12.12
D21	06/08/01	18.8	19.23	2.0 – 12.0	—	6.37	0	12.86
D22	06/08/01	19.9	20.30	2.0 – 12.0	—	8.48	0	11.82
D23	06/08/01	18.7	19.07	2.5 – 12.5	—	7.07	0	12.00
D24	06/08/01	18.5	18.84	2.5 – 12.5	—	6.59	0	12.25
MW6	06/08/01	19.6	19.4	2.9 – 12.9	—	6.17	0	13.23
MW11	06/08/01	18.4	18.09	2.3 – 12.3	—	7.27	0	10.82
MW60	06/08/01	19.9	19.70	3.0 – 13.0		below pump		below pump
MW61	06/08/01	20.0	19.73	3.0 – 13.0	—	7.88	0	11.85
MW63	06/08/01	19.7	19.55	4.0 – 14.0		below pump		below pump
MW64	06/08/01	18.4	18.18	3.0 – 13.0	—	6.54	0	11.64
P1	06/08/01	19.0	19.42	2.5 – 12.5	—	8.10	0	11.32
P2	06/08/01	20.0	20.34	2.5 – 12.5	—	8.58	0	11.76
P3	06/08/01	19.5	19.91	2.5 – 12.5	—	8.40	0	11.51
P4	06/08/01	19.4	19.79	2.0 – 12.0	—	8.04	0	11.75
P5	06/08/01	19.5	19.84	2.5 – 12.5	—	7.10	0	12.74

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Sixteenth Sampling Event – August 2001								
D1	08/06/01	19.7	20.07	2.0 – 12.0	—	8.30	0	11.77
D2	08/06/01	19.3	19.60	2.0 – 12.0	—	7.80	0	11.80
D3/PR-6	08/06/01	19.4	19.13	2.5 – 12.5	—	7.21	0	11.92
D4	08/06/01	19.4	19.66	2.0 – 12.0	—	7.68	0	11.98
D5	08/06/01	19.5	19.88	2.0 – 12.0	—	8.07	0	11.81
D6	08/06/01	19.3	19.66	2.0 – 12.0	—	7.81	0	11.85
D7	08/06/01	19.0	19.35	2.0 – 12.0	—	7.33	0	12.02
D8	08/06/01	19.3	19.60	2.0 – 12.0	—	7.53	0	12.07
D9	08/06/01	19.7	20.02	2.0 – 12.0	—	7.87	0	12.15
D10	08/06/01	19.2	19.57	2.0 – 12.0	—	7.68	0	11.89
D11	08/06/01	19.2	19.57	2.0 – 12.0	—	7.62	0	11.95
D12	08/06/01	18.8	19.14	2.0 – 12.0	—	6.99	0	12.15
D13	08/06/01	18.7	19.02	2.0 – 12.0	—	6.29	0	12.73
D14	08/06/01	19.2	19.57	2.0 – 12.0	—	6.74	0	12.83
D15	08/06/01	20.0	20.41	2.0 – 12.0	—	7.70	0	12.71
D16	08/06/01	18.8	19.13	2.0 – 12.0	—	7.09	0	12.04
D17	08/06/01	18.9	19.22	2.0 – 12.0	—	7.12	0	12.10
D18	08/06/01	18.8	19.18	2.0 – 12.0	—	7.00	0	12.18
D19	08/06/01	18.8	19.13	2.0 – 12.0	—	6.14	0	12.99
D20	08/06/01	18.5	18.90	2.0 – 12.0	—	6.71	0	12.19
D21	08/06/01	18.8	19.23	2.0 – 12.0	—	6.17	0	13.06
D22	08/06/01	19.9	20.30	2.0 – 12.0	—	8.53	0	11.77
D23	08/06/01	18.7	19.07	2.5 – 12.5	—	7.08	0	11.99
D24	08/06/01	18.5	18.84	2.5 – 12.5	—	6.59	0	12.25
MW6	08/06/01	19.6	19.4	2.9 – 12.9	—	6.09	0	13.31
MW11	08/06/01	18.4	18.09	2.3 – 12.3	—	7.20	0	10.89
MW60	08/06/01	19.9	19.70	3.0 – 13.0	—	8.94	0	10.76
MW61	08/06/01	20.0	19.73	3.0 – 13.0	—	7.90	0	11.83
MW63	08/06/01	19.7	19.55	4.0 – 14.0	—	8.00	0	11.55
MW64	08/06/01	18.4	18.18	3.0 – 13.0	—	6.52	0	11.66
P1	08/06/01	19.0	19.42	2.5 – 12.5	—	8.11	0	11.31
P2	08/06/01	20.0	20.34	2.5 – 12.5	—	8.61	0	11.73
P3	08/06/01	19.5	19.91	2.5 – 12.5	—	8.37	0	11.54
P4	08/06/01	19.4	19.79	2.0 – 12.0	—	8.04	0	11.75
P5	08/06/01	19.5	19.84	2.5 – 12.5	—	7.04	0	12.80

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Seventeenth Sampling Event – October 2001								
D1	10/03/01	19.7	20.07	2.0 – 12.0	—	8.39	0	11.68
D2	10/03/01	19.3	19.60	2.0 – 12.0	—	7.95	0	11.65
D3/PR-6	10/03/01	19.4	19.13	2.5 – 12.5		below pump		below pump
D4	10/03/01	19.4	19.66	2.0 – 12.0	—	7.57	0	12.09
D5	10/03/01	19.5	19.88	2.0 – 12.0	—	8.19	0	11.69
D6	10/03/01	19.3	19.66	2.0 – 12.0	—	8.04	0	11.62
D7	10/03/01	19.0	19.35	2.0 – 12.0	—	7.26	0	12.09
D8	10/03/01	19.3	19.60	2.0 – 12.0	—	7.37	0	12.23
D9	10/03/01	19.7	20.02	2.0 – 12.0	—	7.66	0	12.36
D10	10/03/01	19.2	19.57	2.0 – 12.0	—	7.75	0	11.82
D11	10/03/01	19.2	19.57	2.0 – 12.0	—	7.64	0	11.93
D12	10/03/01	18.8	19.14	2.0 – 12.0	—	6.98	0	12.16
D13	10/03/01	18.7	19.02	2.0 – 12.0	—	5.94	0	13.08
D14	10/03/01	19.2	19.57	2.0 – 12.0	—	6.34	0	13.23
D15	10/03/01	20.0	20.41	2.0 – 12.0	—	7.24	0	13.17
D16	10/03/01	18.8	19.13	2.0 – 12.0	—	7.07	0	12.06
D17	10/03/01	18.9	19.22	2.0 – 12.0	—	7.07	0	12.15
D18	10/03/01	18.8	19.18	2.0 – 12.0	—	6.71	0	12.47
D19	10/03/01	18.8	19.13	2.0 – 12.0	—	5.71	0	13.42
D20	10/03/01	18.5	18.90	2.0 – 12.0	—	6.60	0	12.30
D21	10/03/01	18.8	19.23	2.0 – 12.0	—	5.72	0	13.51
D22	10/03/01	19.9	20.30	2.0 – 12.0	—	8.50	0	11.80
D23	10/03/01	18.7	19.07	2.5 – 12.5	—	7.03	0	12.04
D24	10/03/01	18.5	18.84	2.5 – 12.5	—	6.46	0	12.38
MW6	10/03/01	19.6	19.4	2.9 – 12.9	NM	NM	NM	NM
MW11	10/03/01	18.4	18.09	2.3 – 12.3	—	7.08	0	11.01
MW60	10/03/01	19.9	19.70	3.0 – 13.0		below pump		below pump
MW61	10/03/01	20.0	19.73	3.0 – 13.0	—	7.78	0	11.95
MW63	10/03/01	19.7	19.55	4.0 – 14.0	—	7.99	0	11.56
MW64	10/03/01	18.4	18.18	3.0 – 13.0	—	8.47	0	9.71
P1	10/03/01	19.0	19.42	2.5 – 12.5	—	7.99	0	11.43
P2	10/03/01	20.0	20.34	2.5 – 12.5	—	8.61	0	11.73
P3	10/03/01	19.5	19.91	2.5 – 12.5	—	8.34	0	11.57
P4	10/03/01	19.4	19.79	2.0 – 12.0	—	8.12	0	11.67
P5	10/03/01	19.5	19.84	2.5 – 12.5	—	6.55	0	13.29

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level
NM Not measured

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Eighteenth Sampling Event – December 2001								
D1	12/01/01	19.7	20.07	2.0 – 12.0	—	8.90	0	11.17
D2	12/01/01	19.3	19.60	2.0 – 12.0	—	8.41	0	11.19
D3/PR-6	12/01/01	19.4	19.13	2.5 – 12.5	—	7.80	0	11.33
D4	12/01/01	19.4	19.66	2.0 – 12.0	—	8.25	0	11.41
D5	12/01/01	19.5	19.88	2.0 – 12.0	—	8.69	0	11.19
D6	12/01/01	19.3	19.66	2.0 – 12.0	—	8.34	0	11.32
D7	12/01/01	19.0	19.35	2.0 – 12.0	—	7.92	0	11.43
D8	12/01/01	19.3	19.60	2.0 – 12.0	—	8.08	0	11.52
D9	12/01/01	19.7	20.02	2.0 – 12.0	—	8.35	0	11.67
D10	12/01/01	19.2	19.57	2.0 – 12.0	—	8.27	0	11.30
D11	12/01/01	19.2	19.57	2.0 – 12.0	—	8.26	0	11.31
D12	12/01/01	18.8	19.14	2.0 – 12.0	—	7.99	0	11.15
D13	12/01/01	18.7	19.02	2.0 – 12.0	—	7.09	0	11.93
D14	12/01/01	19.2	19.57	2.0 – 12.0	—	7.92	0	11.65
D15	12/01/01	20.0	20.41	2.0 – 12.0	—	8.40	0	12.01
D16	12/01/01	18.8	19.13	2.0 – 12.0	—	7.65	0	11.48
D17	12/01/01	18.9	19.22	2.0 – 12.0	—	7.74	0	11.48
D18	12/01/01	18.8	19.18	2.0 – 12.0	—	7.61	0	11.57
D19	12/01/01	18.8	19.13	2.0 – 12.0	—	7.02	0	12.11
D20	12/01/01	18.5	18.90	2.0 – 12.0	—	7.32	0	11.58
D21	12/01/01	18.8	19.23	2.0 – 12.0	—	6.98	0	12.25
D22	12/01/01	19.9	20.30	2.0 – 12.0	—	9.09	0	11.21
D23	12/01/01	18.7	19.07	2.5 – 12.5	—	7.66	0	11.41
D24	12/01/01	18.5	18.84	2.5 – 12.5	—	7.21	0	11.63
MW6	12/01/01	19.6	19.4	2.9 – 12.9	NM	NM	NM	NM
MW11	12/01/01	18.4	18.09	2.3 – 12.3	—	7.67	0	10.42
MW60	12/01/01	19.9	19.70	3.0 – 13.0	—	8.56	0	11.14
MW61	12/01/01	20.0	19.73	3.0 – 13.0	—	8.19	0	11.54
MW63	12/01/01	19.7	19.55	4.0 – 14.0	—	8.52	0	11.03
MW64	12/01/01	18.4	18.18	3.0 – 13.0	—	7.11	0	11.07
P1	12/01/01	19.0	19.42	2.5 – 12.5	—	8.60	0	10.82
P2	12/01/01	20.0	20.34	2.5 – 12.5	—	9.18	0	11.16
P3	12/01/01	19.5	19.91	2.5 – 12.5	—	8.90	0	11.01
P4	12/01/01	19.4	19.79	2.0 – 12.0	—	8.62	0	11.17
P5	12/01/01	19.5	19.84	2.5 – 12.5	—	7.67	0	12.17

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level
NM Not measured

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Nineteenth Sampling Event – February 2002								
D1	02/19/02	19.7	20.07	2.0 – 12.0	—	8.77	0	11.30
D2	02/19/02	19.3	19.60	2.0 – 12.0	—	8.19	0	11.41
D3/PR-6	02/19/02	19.4	19.13	2.5 – 12.5	—	7.63	0	11.50
D4	02/19/02	19.4	19.66	2.0 – 12.0	—	8.07	0	11.59
D5	02/19/02	19.5	19.88	2.0 – 12.0	—	8.58	0	11.30
D6	02/19/02	19.3	19.66	2.0 – 12.0	—	8.26	0	11.40
D7	02/19/02	19.0	19.35	2.0 – 12.0	—	7.82	0	11.53
D8	02/19/02	19.3	19.60	2.0 – 12.0	—	7.97	0	11.63
D9	02/19/02	19.7	20.02	2.0 – 12.0	—	8.27	0	11.75
D10	02/19/02	19.2	19.57	2.0 – 12.0	—	8.22	0	11.35
D11	02/19/02	19.2	19.57	2.0 – 12.0	—	8.12	0	11.45
D12	02/19/02	18.8	19.14	2.0 – 12.0	—	7.63	0	11.51
D13	02/19/02	18.7	19.02	2.0 – 12.0	—	6.99	0	12.03
D14	02/19/02	19.2	19.57	2.0 – 12.0	—	7.74	0	11.83
D15	02/19/02	20.0	20.41	2.0 – 12.0	—	8.29	0	12.12
D16	02/19/02	18.8	19.13	2.0 – 12.0	—	7.65	0	11.48
D17	02/19/02	18.9	19.22	2.0 – 12.0	—	7.68	0	11.54
D18	02/19/02	18.8	19.18	2.0 – 12.0	—	7.51	0	11.67
D19	02/19/02	18.8	19.13	2.0 – 12.0	—	6.92	0	12.21
D20	02/19/02	18.5	18.90	2.0 – 12.0	NM	NM	NM	NM
D21	02/19/02	18.8	19.23	2.0 – 12.0	—	6.84	0	12.39
D22	02/19/02	19.9	20.30	2.0 – 12.0	—	8.96	0	11.34
D23	02/19/02	18.7	19.07	2.5 – 12.5	—	7.66	0	11.41
D24	02/19/02	18.5	18.84	2.5 – 12.5	—	7.13	0	11.71
MW6	02/19/02	19.6	19.4	2.9 – 12.9	NM	NM	NM	NM
MW11	02/19/02	18.4	18.09	2.3 – 12.3	—	7.86	0	10.23
MW60	02/19/02	19.9	19.70	3.0 – 13.0	—	8.43	0	11.27
MW61	02/19/02	20.0	19.73	3.0 – 13.0	—	8.36	0	11.37
MW63	02/19/02	19.7	19.55	4.0 – 14.0	—	8.56	0	10.99
MW64	02/19/02	18.4	18.18	3.0 – 13.0	—	7.13	0	11.05
P1	02/19/02	19.0	19.42	2.5 – 12.5	—	8.76	0	10.66
P2	02/19/02	20.0	20.34	2.5 – 12.5	—	9.09	0	11.25
P3	02/19/02	19.5	19.91	2.5 – 12.5	—	8.96	0	10.95
P4	02/19/02	19.4	19.79	2.0 – 12.0	—	8.59	0	11.20
P5	02/19/02	19.5	19.84	2.5 – 12.5	—	7.63	0	12.21

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level
NM Not measured

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Twentieth Sampling Event – April 2002								
D1	04/09/02	19.7	20.07	2.0 – 12.0	—	8.58	0	11.49
D2	04/09/02	19.3	19.60	2.0 – 12.0	—	8.03	0	11.57
D3/PR-6	04/09/02	19.4	19.13	2.5 – 12.5	—	7.47	0	11.66
D4	04/09/02	19.4	19.66	2.0 – 12.0	—	7.93	0	11.73
D5	04/09/02	19.5	19.88	2.0 – 12.0	—	8.40	0	11.48
D6	04/09/02	19.3	19.66	2.0 – 12.0	—	8.10	0	11.56
D7	04/09/02	19.0	19.35	2.0 – 12.0	—	7.56	0	11.79
D8	04/09/02	19.3	19.60	2.0 – 12.0	—	7.80	0	11.80
D9	04/09/02	19.7	20.02	2.0 – 12.0	—	8.13	0	11.89
D10	04/09/02	19.2	19.57	2.0 – 12.0	—	7.98	0	11.59
D11	04/09/02	19.2	19.57	2.0 – 12.0	—	7.88	0	11.69
D12	04/09/02	18.8	19.14	2.0 – 12.0	—	7.36	0	11.78
D13	04/09/02	18.7	19.02	2.0 – 12.0	—	6.91	0	12.11
D14	04/09/02	19.2	19.57	2.0 – 12.0	—	7.08	0	12.49
D15	04/09/02	20.0	20.41	2.0 – 12.0	—	8.12	0	12.29
D16	04/09/02	18.8	19.13	2.0 – 12.0	—	7.43	0	11.70
D17	04/09/02	18.9	19.22	2.0 – 12.0	—	7.42	0	11.80
D18	04/09/02	18.8	19.18	2.0 – 12.0	—	7.32	0	11.86
D19	04/09/02	18.8	19.13	2.0 – 12.0	—	6.53	0	12.60
D20	04/09/02	18.5	18.90	2.0 – 12.0	—	7.09	0	11.81
D21	04/09/02	18.8	19.23	2.0 – 12.0	—	6.60	0	12.63
D22	04/09/02	19.9	20.30	2.0 – 12.0	—	8.82	0	11.48
D23	04/09/02	18.7	19.07	2.5 – 12.5	—	7.44	0	11.63
D24	04/09/02	18.5	18.84	2.5 – 12.5	—	6.93	0	11.91
MW6	04/09/02	19.6	19.4	2.9 – 12.9	NM	NM	NM	NM
MW11	04/09/02	18.4	18.09	2.3 – 12.3	—	7.69	0	10.40
MW60	04/09/02	19.9	19.70	3.0 – 13.0	—	8.26	0	11.44
MW61	04/09/02	20.0	19.73	3.0 – 13.0	—	8.20	0	11.53
MW63	04/09/02	19.7	19.55	4.0 – 14.0	—	8.41	0	11.14
MW64	04/09/02	18.4	18.18	3.0 – 13.0	—	6.91	0	11.27
P1	04/09/02	19.0	19.42	2.5 – 12.5	—	8.56	0	10.86
P2	04/09/02	20.0	20.34	2.5 – 12.5	—	8.94	0	11.40
P3	04/09/02	19.5	19.91	2.5 – 12.5	—	8.78	0	11.13
P4	04/09/02	19.4	19.79	2.0 – 12.0	—	8.40	0	11.39
P5	04/09/02	19.5	19.84	2.5 – 12.5	—	7.43	0	12.41

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level
NM Not measured

Table 4. Groundwater Elevations (continued)

Well Number	Date Measured	Elevation (feet MSL)		Depth of Screened Interval (feet BGS)	Depth of Free Product (feet BTOC)	Water Depth (feet BTOC)	Product Thickness (feet)	Groundwater Elevation (feet MSL)
		Ground Surface	Top of Casing					
Twenty-first Sampling Event – June 2002								
D1	06/07/02	19.7	20.07	2.0 – 12.0	—	9.03	0	11.04
D2	06/07/02	19.3	19.60	2.0 – 12.0	—	8.48	0	11.12
D3/PR-6	06/07/02	19.4	19.13	2.5 – 12.5	—	7.91	0	11.22
D4	06/07/02	19.4	19.66	2.0 – 12.0	—	8.37	0	11.29
D5	06/07/02	19.5	19.88	2.0 – 12.0	—	8.86	0	11.02
D6	06/07/02	19.3	19.66	2.0 – 12.0	—	8.57	0	11.09
D7	06/07/02	19.0	19.35	2.0 – 12.0	—	8.03	0	11.32
D8	06/07/02	19.3	19.60	2.0 – 12.0	—	8.28	0	11.32
D9	06/07/02	19.7	20.02	2.0 – 12.0	—	8.59	0	11.43
D10	06/07/02	19.2	19.57	2.0 – 12.0	—	8.42	0	11.15
D11	06/07/02	19.2	19.57	2.0 – 12.0	—	8.37	0	11.20
D12	06/07/02	18.8	19.14	2.0 – 12.0	—	7.84	0	11.30
D13	06/07/02	18.7	19.02	2.0 – 12.0	—	7.41	0	11.61
D14	06/07/02	19.2	19.57	2.0 – 12.0	—	7.69	0	11.88
D15	06/07/02	20.0	20.41	2.0 – 12.0	—	8.67	0	11.74
D16	06/07/02	18.8	19.13	2.0 – 12.0	—	7.95	0	11.18
D17	06/07/02	18.9	19.22	2.0 – 12.0	—	7.93	0	11.29
D18	06/07/02	18.8	19.18	2.0 – 12.0	—	7.84	0	11.34
D19	06/07/02	18.8	19.13	2.0 – 12.0	—	7.03	0	12.10
D20	06/07/02	18.5	18.90	2.0 – 12.0	—	7.62	0	11.28
D21	06/07/02	18.8	19.23	2.0 – 12.0	—	7.12	0	12.11
D22	06/07/02	19.9	20.30	2.0 – 12.0	—	9.26	0	11.04
D23	06/07/02	18.7	19.07	2.5 – 12.5	—	7.94	0	11.13
D24	06/07/02	18.5	18.84	2.5 – 12.5	—	7.44	0	11.40
MW6	06/07/02	19.6	19.4	2.9 – 12.9	NM	NM	NM	NM
MW11	06/07/02	18.4	18.09	2.3 – 12.3	—	8.08	0	10.01
MW60	06/07/02	19.9	19.70	3.0 – 13.0	—	8.71	0	10.99
MW61	06/07/02	20.0	19.73	3.0 – 13.0	—	8.64	0	11.09
MW63	06/07/02	19.7	19.55	4.0 – 14.0	—	8.83	0	10.72
MW64	06/07/02	18.4	18.18	3.0 – 13.0	—	7.41	0	10.77
P1	06/07/02	19.0	19.42	2.5 – 12.5	—	8.99	0	10.43
P2	06/07/02	20.0	20.34	2.5 – 12.5	—	9.38	0	10.96
P3	06/07/02	19.5	19.91	2.5 – 12.5	—	9.23	0	10.68
P4	06/07/02	19.4	19.79	2.0 – 12.0	—	8.86	0	10.93
P5	06/07/02	19.5	19.84	2.5 – 12.5	—	7.90	0	11.94

NOTES:
BGS Below ground surface
BTOC Below top of casing
MSL Mean sea level
NM Not measured

Table 5. Area of Groundwater Contamination

Sampling Event	Area of Benzene Contamination in Groundwater (ft^2)	Area of Free Product (ft^2)
May 1999	22,700	1,850
June 1999	18,600	1,800
July 1999	17,050	2,375 + 500 = 2,875
August 1999	18,000	1,950
September 1999	14,875	2,225
October 1999	15,475	2,850
December 1999	8,575	1,500 + 340 = 1,840
January 2000	10,650	1,770 + 100 = 1,870
March 2000	6,450 + 3,000 = 9,450	580 + 213 = 793
May 2000	6,550 + 2,665 = 8,815	188 + 271 = 459
July 2000	5,250 + 2,550 = 7,800	679
September 2000	6,750 + 2,350 = 9,100	669
November/December 2000	7,600	205
February 2001	7,500	745 + 65 = 459
April 2001	7,100	182
June 2001	5,350	0
August 2001	5,050 + 190 = 5,240	0
October 2001	5,350 + 150 + 200 = 5,700	0
December 2001	5,300 + 140 = 5,440	0
February 2002	4,650	0
April 2002	3,450	0
June 2002	2,930 + 90 = 3,020	0

APPENDIX III

SOIL BORING LOGS

THIS PAGE INTENTIONALLY LEFT BLANK.

Boring logs for product delineation points D1 through D24, injection wells J1 through J24, observation wells P1 through P5, and product recovery wells MW8A and PR-1 through PR-5 were provided in the Corrective Action Plan–Part B Addendum #1 and First Annual Pilot Study Progress Report (SAIC 2000).

Boring logs for product recovery wells PR-6 and PR-7 were provided in the Second Annual Pilot Study Progress Report (SAIC 2001).

No wells were installed during the time period covered by this report (July 2001 through June 2002).

THIS PAGE INTENTIONALLY LEFT BLANK.

APPENDIX IV

MONITORING WELL DETAILS

THIS PAGE INTENTIONALLY LEFT BLANK.

Well construction diagrams for injection wells J1 through J24, observation wells P1 through P5, and product recovery wells MW8A and PR-1 through PR-5 were provided in the Corrective Action Plan–Part B Addendum #1 and First Annual Pilot Study Progress Report (SAIC 2000).

Well construction diagram for injection wells J25, J26, and J27, and product recovery wells PR-6 and PR-7 were provided in the Second Annual Progress Report (SAIC 2001).

No wells were installed during the time period covered by this report (July 2001 through June 2002).

THIS PAGE INTENTIONALLY LEFT BLANK.

APPENDIX V

GROUNDWATER LABORATORY RESULTS

THIS PAGE INTENTIONALLY LEFT BLANK.

ANALYTICAL LABORATORY INFORMATION AND DATA VALIDATION CODES

THIS PAGE INTENTIONALLY LEFT BLANK.

STATE OF GEORGIA
ENVIRONMENTAL LABORATORY ACCREDITATION

	Name of Laboratory:	**General Engineering Laboratories, Inc.**
	Address:	P.O. Box 30712 2040 Savage Road Charleston, SC 29407
	Contact:	Bob Pullano or Wendy Dimmick
	Telephone number:	(843) 556-8171
	Fax number:	(843) 766-1178
#1	Accrediting Authority:	**State of South Carolina**
	Accreditation Number:	SC-10120001
	Effective Date:	Extension granted while recertification in process
	Expiration Date:	—
	Accreditation Scope:	SDWA, CWA, RCRA, CERCLA
#2	Accrediting Authority:	**State of Florida**
	Accreditation Number:	E-87156
	Effective Date:	July 1, 2001
	Expiration Date:	June 30, 2003
	Accreditation Scope:	SDWA, CWA, RCRA, CERCLA

DATA VALIDATION REASON CODES

Organic, Inorganic, and Radiological Analytical Data

Holding Times	**GC/MS Tuning**
A01 Extraction holding times were exceeded. A02 Extraction holding times were grossly exceeded. A03 Analysis holding times were exceeded. A04 Analysis holding times were grossly exceeded. A05 Samples were not preserved properly. A06 Professional judgment was used to qualify the data.	B01 Mass calibration was in error, even after applying expanded criteria. B02 Mass calibration was not performed every 12 hours. B03 Mass calibration did not meet ion abundance criteria. B04 Professional judgment was used to qualify the data.
Initial/Continuing Calibration – Organics	**Initial/Continuing Calibration – Inorganics**
C01 Initial calibration RRF was < 0.05. C02 Initial calibration RDS was > 30%. C03 Initial calibration sequence was not followed as required. C04 Continuing calibration RRF was < 0.05. C05 Continuing calibration %D was > 25%. C06 Continuing calibration was not performed at the required frequency. C07 Resolution criteria were not met. C08 RPD criteria were not met. C09 RDS criteria were not met. C10 Retention time of compounds was outside windows. C11 Compounds were not adequately resolved. C12 Breakdown of endrin or DDT was > 30%. C13 Combined breakdown of endrin/DDT was > 30%. C14 Professional judgment was used to qualify the data.	D01 ICV or CCV were not performed for every analyte. D02 ICV recovery was above the upper control limit. D03 ICV recovery was below the lower control limit. D04 CCV recovery was above the upper control limit. D05 CCV recovery was below the lower control limit. D06 Standard curve was not established with the minimum number of standards. D07 Instrument was not calibrated daily or each time the instrument was set up. D08 Correlation coefficient was <0.995. D09 Mid range cyanide standard was not distilled. D10 Professional judgment was used to qualify the data.
ICP and Furnace Requirements	**Blanks**
E01 Interference check sample recovery was outside the control limit. E02 Duplicate injections were outside the control limit. E03 Post digestion spike recovery was outside the control limit. E04 MSA was required but not performed. E05 MSA correlation coefficient was <0.995. E06 MSA spikes were not at the correct concentration. E07 Serial dilution criteria were not met. E08 Professional judgment was used to qualify the data.	F01 Sample data were qualified as a result of the method blank. F02 Sample data were qualified as a result of the field blank. F03 Sample data were qualified as a result of the equipment rinsate. F04 Sample data were qualified as a result of the trip blank. F05 Gross contamination exists. F06 Concentration of the contaminant was detected at a level below the CRQL. F07 Concentration of the contaminant was detected at a level less than the action limit, but greater than the CRQL. F08 Concentration of the contaminant was detected at a level that exceeds the action level. F09 No laboratory blanks were analyzed. F10 Blank had a negative value >2×'s the IDL. F11 Blanks were not analyzed at required frequency. F12 Professional judgment was used to qualify the data.

DATA VALIDATION REASON CODES

Organic, Inorganic, and Radiological Analytical Data (continued)

Surrogate/Radiological Chemical Recovery G01 Surrogate/radiological chemical recovery was above the upper control limit. G02 Surrogate/radiological chemical recovery was below the lower control limit. G03 Surrogate recovery was <10%. G04 Surrogate recovery was zero. G05 Surrogate/radiological chemical recovery data was not present. G06 Professional judgment was used to qualify the data. G07 Radiological chemical recovery was <20%. G08 Radiological chemical recovery was >150%.	**Matrix Spike/Matrix Spike Duplicate (MS/MSD)** H01 MS/MSD recovery was above the upper control limit. H02 MS/MSD recovery was below the lower control limit. H03 MD/MSD recovery was <10%. H04 MS/MSD pairs exceed the RPD limit. H05 No action was taken on MS/MSD limit. H06 Professional judgment was used to qualify the data. H07 Radiological MS/MSD recovery was <20%. H08 Radiological MS/MSD recovery was >160%. H09 Radiological MS/MSD samples were not analyzed at the required frequency.
Matrix Spike I01 MS recovery was above the upper control limit. I02 MS recovery was below the lower control limit. I03 MS recovery was <30%. I04 No action was taken on MS data. I05 Professional judgment was used to qualify the data.	**Laboratory Duplicate** J01 Duplicate RPD/radiological duplicate error ratio (DER) was outside the control limit. J02 Duplicate sample results were >5× the CRDL. J03 Duplicate sample results were <5× the CRDL. J04 Professional judgment was used to qualify the data. J05 Duplicate was not analyzed at the required frequency.
Internal Area Summary K01 Area counts were outside the control limits. K02 Extremely low area counts or performance was exhibited by a major drop-off. K03 IS retention time varied by more than 30 seconds. K04 Professional judgment was used to qualify the data.	**Pesticide Cleanup Checks** L01 10% recovery was obtained during either check. L02 Recoveries during either check were >120%. L03 GPC Cleanup recoveries were outside the control limits. L04 Florisil cartridge cleanup recoveries were outside the control limits. L05 Professional judgment was used to qualify the data.
Target Compound Identification M01 Incorrect identifications were made. M02 Qualitative criteria were not met. M03 Cross contamination occurred. M04 Confirmatory analysis was not performed M05 No results were provided. M06 Analysis occurred outside 12-hr GC/MS window. M07 Professional judgment was used to qualify the data. M08 The %D between the two pesticide/PCB column checks was >25%.	**Compound Quantitation and Reported CRQLs** N01 Quantitation limits were affected by large, off-scale peaks. N02 MDLs reported by the laboratory exceeded corresponding CRQLs. N03 Professional judgment used to qualify the data.
Tentatively Identified Compounds (TICs) O01 Compound was suspected laboratory contaminant and was not detected in the blank. O02 TIC result was not above 10× the level found in the blank. O03 Professional judgment was used to qualify analytical data.	**Laboratory Control Samples (LCSs)** P01 LCS recovery was above upper control limit. P02 LCS recovery was below lower control limit. P03 LCS recovery was <50%. P04 No action was taken on the LCS data. P05 LCS was not analyzed at required frequency. P06 Radiological LCS recovery was <50% for aqueous samples; <40% for solid samples. P07 Radiological LCS recovery was >150% for aqueous samples; >160% for solid samples. P08 Professional judgment was used to qualify the data.

DATA VALIDATION REASON CODES

Organic, Inorganic, and Radiological Analytical Data (continued)

Field Duplicate Q01 Field duplicate RPDs were >30% for waters and/or >50% for soils. Q02 Radiological field duplicate error ratio (DER) was outside the control limit. Q03 Duplicate sample results were >5× the CRDL. Q04 Duplicate sample results were <5× the CRDL.	**Radiological Calibration** R01 Efficiency calibration criteria were not met. R02 Energy calibration criteria were not met. R03 Resolution calibration criteria were not met. R04 Background determination criteria were not met. R05 Quench curve criteria were not met. R06 Absorption curve criteria were not met. R07 Plateau curve criteria were not met. R08 Professional judgment was used to qualify the data.
Radiological Calibration Verification S01 Efficiency verification criteria were not met. S02 Energy verification criteria were not met. S03 Resolution verification criteria were not met. S04 Background verification criteria were not met. S05 Cross-talk verification criteria were not met. S06 Professional judgment was used to qualify the data.	

The laboratory analytical results for the baseline sampling event and the first year of the pilot study (i.e., 1999 through May 2000) were included in the Corrective Action Plan–Part B Addendum #1 and First Annual Pilot Study Progress Report (SAIC 2000).

The laboratory analytical results for the second year of the pilot study (i.e., June 2000 through June 2001) were included in the Second Annual Pilot Study Progress Report (SAIC 2001).

THIS PAGE INTENTIONALLY LEFT BLANK.

SIXTEENTH SAMPLING EVENT

AUGUST 2001

THIS PAGE INTENTIONALLY LEFT BLANK.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE61G2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W412

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(u

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	11.4		F04,F08
108-88-3	Toluene	10.2		
100-41-4	Ethylbenzene	80.0		
1330-20-7	Xylenes (total)	201		

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE63G2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W418

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.0	U
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	0.35	J

U → J

DATA VALIDATION COPY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AER6G2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W506

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/17/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(u

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.77	J
108-88-3	Toluene	4.0	U
100-41-4	Ethylbenzene	108	
1330-20-7	Xylenes (total)	185	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED4G2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W510

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/17/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(u L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	13.2		=
108-88-3	Toluene		~~0.47~~	J	U FOY, FO6
100-41-4	Ethylbenzene		13.0		=
1330-20-7	Xylenes (total)		1.9	J	J

DATA VALIDATION COPY

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED6G2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W416

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(u L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	94.4		U FOY, FOL
108-88-3	Toluene		~~0.82~~	J	
100-41-4	Ethylbenzene		21.2		
1330-20-7	Xylenes (total)		38.9		

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

-AED7G2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253010

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: 1W419

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(u

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	20	196		=
108-88-3	Toluene		~~3.7~~	J	U FOR, FOR
100-41-4	Ethylbenzene		341		=
1330-20-7	Xylenes (total)		316		=

FORM I VOA OLM03.1

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED9G2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253016

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W434

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/17/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 5.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(u

use

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	885	~~739~~	~~E~~ D	= F04, F08
108-88-3	Toluene		28.5		
100-41-4	Ethylbenzene	901	~~748~~	~~E~~ D	=
1330-20-7	Xylenes (total)	2630	~~1780~~	~~E~~ D	=

DATA VALIDATION COPY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED0G2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W429

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(u L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	57.3		=
108-88-3	Toluene		~~0.36~~	J	U F04, F06
100-41-4	Ethylbenzene		0.25	J	J
1330-20-7	Xylenes (total)		76.9		=

DATA VALIDATION COPY

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

-AEDBG2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253015

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W513

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/17/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	14.4	
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	0.38	J

DATA VERIFICATION
DONE

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDDG2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W507

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/17/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	42.8		U FOY, F06
108-88-3	Toluene		~~0.31~~	J	
100-41-4	Ethylbenzene		14.6		
1330-20-7	Xylenes (total)		41.1		

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDGG2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253014

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W432

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/17/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	12.3	
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	0.67	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDJG2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W431

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(u

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	53.0		=
108-88-3	Toluene		~~0.51~~	J	U FOY, FOL
100-41-4	Ethylbenzene		28.0		=
1330-20-7	Xylenes (total)		16.8		=

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP1G2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W410

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(u L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.9	
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	2.1	J

11 4 5

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP2G2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W436

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/17/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(u L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	0.57	J	J
108-88-3	Toluene	2.0	U	U
100-41-4	Ethylbenzene	0.43	J	J
1330-20-7	Xylenes (total)	0.44	J	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP4G2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W413

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/16/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	0.17	J	J
108-88-3	Toluene	2.0	U	
100-41-4	Ethylbenzene	0.20	J	J
1330-20-7	Xylenes (total)	0.83	J	J

Trip Blank

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HP0043

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 47253

Matrix: (soil/water) WATER Lab Sample ID: 47253017

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 1W514

Level: (low/med) LOW Date Received: 08/09/01

% Moisture: not dec. _____ Date Analyzed: 08/17/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(L

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	2.0	U	U
108-88-3	Toluene	0.26	J	J
100-41-4	Ethylbenzene	2.0	U	U
1330-20-7	Xylenes (total)	5.0	U	U

FORM I VOA

OLM03.1

THIS PAGE INTENTIONALLY LEFT BLANK.

SEVENTEENTH SAMPLING EVENT

OCTOBER 2001

THIS PAGE INTENTIONALLY LEFT BLANK.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE60H2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038015

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E508

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	0.39	J	J H02
108-88-3	Toluene	2.0	U	U
100-41-4	Ethylbenzene	0.89	J	J
1330-20-7	Xylenes (total)	1.4	J	J

DATA VALIDATION COPY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE61H2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038017

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E442

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	28.7		J H02
108-88-3	Toluene	13.8		=
100-41-4	Ethylbenzene	61.0		=
1330-20-7	Xylenes (total)	119		=

DATA VALIDATION COPY

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE63H2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038016

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E509

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.20	J
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	5.0	U

5 Hor
4

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AER6H2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038014

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E517

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.5	J
108-88-3	Toluene	0.69	J
100-41-4	Ethylbenzene	130	
1330-20-7	Xylenes (total)	267	

J H02

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED4H2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E427

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

USQ

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	427 ~~425~~	E D	J HO2
108-88-3	Toluene	1.1	J	J
100-41-4	Ethylbenzene	48.3		=
1330-20-7	Xylenes (total)	34.6		=

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED6H2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E434

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

USR

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	135 ~~126~~	~~E~~ D	J HO2
108-88-3	Toluene	1.5	J	J
100-41-4	Ethylbenzene	24.2		"
1330-20-7	Xylenes (total)	51.9		"

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED7H2-VIAL#2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E513

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	194	
108-88-3	Toluene	2.9	J
100-41-4	Ethylbenzene	346 ~~389~~	E D
1330-20-7	Xylenes (total)	281	

J HO2

J

=

=

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED9H2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E512

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 25.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	643		U HDV
108-88-3	Toluene	20.3	J	U =
100-41-4	Ethylbenzene	734		=
1330-20-7	Xylenes (total)	2720		=

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED0H2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E515

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	29.0	
108-88-3	Toluene	4.0	U
100-41-4	Ethylbenzene	0.40	J
1330-20-7	Xylenes (total)	11.1	

J H02

U

J

=

DATA VALIDATION COPY

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDBH2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E510

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	8.5		JHDL
108-88-3	Toluene	0.83	J	J
100-41-4	Ethylbenzene	2.0	U	U
1330-20-7	Xylenes (total)	0.60	J	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDDH2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E431

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	33.1		J H02
108-88-3	Toluene	0.96	J	J
100-41-4	Ethylbenzene	16.7		=
1330-20-7	Xylenes (total)	57.3		=

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDGH2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E432

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	13.9		J H02
108-88-3	Toluene	2.0	U	U
100-41-4	Ethylbenzene	0.59	J	J
1330-20-7	Xylenes (total)	0.80	J	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDJH2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E433

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	17.1	
108-88-3	Toluene	0.37	J
100-41-4	Ethylbenzene	10.2	
1330-20-7	Xylenes (total)	4.2	J

J H02

J H15

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP1H2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E437

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	12.2		J HDL
108-88-3	Toluene	2.0	U	U
100-41-4	Ethylbenzene	1.6	J	J
1330-20-7	Xylenes (total)	15.1		=

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP2H2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E506

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.60	J
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	0.70	J
1330-20-7	Xylenes (total)	0.58	J

J H02

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP4H2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E507

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	0.33	J	J HO2
108-88-3	Toluene	0.26	J	J
100-41-4	Ethylbenzene	2.0	U	U
1330-20-7	Xylenes (total)	0.20	J	J

Trip Blank

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB2509

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 50038

Matrix: (soil/water) WATER Lab Sample ID: 50038001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 8E426

Level: (low/med) LOW Date Received: 10/05/01

% Moisture: not dec. _____ Date Analyzed: 10/12/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	2.0	U	u
108-88-3	Toluene	2.0	U	
100-41-4	Ethylbenzene	2.0	U	
1330-20-7	Xylenes (total)	5.0	U	

THIS PAGE INTENTIONALLY LEFT BLANK.

EIGHTEENTH SAMPLING EVENT

DECEMBER 2001

THIS PAGE INTENTIONALLY LEFT BLANK.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE60J2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M117

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/03/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.0	U
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	5.0	U

u

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE61J2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M119

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/03/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.0	U
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	5.0	U

u

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE63J2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M118

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/03/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.0	U
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	5.0	U

a

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AER6J2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M125

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/03/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	36.0		=
108-88-3	Toluene	14.0		= FOY, FOB
100-41-4	Ethylbenzene	109		=
1330-20-7	Xylenes (total)	178		=

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED4J2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761017

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M207

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/04/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	99.1		=
108-88-3	Toluene	4.0 ~~1.1~~	J	U F04, F06
100-41-4	Ethylbenzene	5.2		=
1330-20-7	Xylenes (total)	1.2	J	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED6J2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M121

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/03/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	24.6		=
108-88-3	Toluene		~~0.37~~	J	U FOY, FO6
100-41-4	Ethylbenzene		0.95	J	J
1330-20-7	Xylenes (total)		2.7	J	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED7J2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761015

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M113

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/03/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	20	174		=
108-88-3	Toluene		~~3.7~~	J	= U FO4, FO6
100-41-4	Ethylbenzene		363		=
1330-20-7	Xylenes (total)		199		=

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED9J2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M206

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/04/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	882			=
108-88-3	Toluene	40 ~~25.5~~		J	U F04, F06
100-41-4	Ethylbenzene	682			=
1330-20-7	Xylenes (total)	2340			=

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED0J2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M124

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/03/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	7.3		=
108-88-3	Toluene		~~0.38~~	J	U F04, F06
100-41-4	Ethylbenzene		7.4		=
1330-20-7	Xylenes (total)		29.1		=

FORM I VOA

DATA VALIDATION

OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDBJ2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M211

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/04/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	74.8		=
108-88-3	Toluene		~~0.57~~	J	U FO4, FO6
100-41-4	Ethylbenzene		23.5		=
1330-20-7	Xylenes (total)		28.4		=

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDDJ2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M212

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/04/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	52.9		=
108-88-3	Toluene		~~0.67~~	J	U FOY, FO6
100-41-4	Ethylbenzene		18.1		=
1330-20-7	Xylenes (total)		60.0		=

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDGJ2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761014

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M116

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/03/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	5.7		=
108-88-3	Toluene		~~0.45~~	J	= U FOY, FOG
100-41-4	Ethylbenzene		8.5		=
1330-20-7	Xylenes (total)		12.8		=

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDJJ2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M120

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/03/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	41.3		=
108-88-3	Toluene		~~0.59~~	J	4 F04 F06
100-41-4	Ethylbenzene		22.4		=
1330-20-7	Xylenes (total)		37.0		=

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP1J2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M115

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/03/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	10.2		
108-88-3	Toluene		~~0.19~~	J	U FOX, FO6
100-41-4	Ethylbenzene		1.6	J	
1330-20-7	Xylenes (total)		12.8		

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP2J2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M122

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/03/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	0.41	J	J
108-88-3	Toluene	2.0	U	U
100-41-4	Ethylbenzene	0.26	J	J
1330-20-7	Xylenes (total)	5.0	U	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP4J2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

Matrix: (soil/water) WATER Lab Sample ID: 52761011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 5M123

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/03/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	2.0	U	U
108-88-3	Toluene	2.0	U	
100-41-4	Ethylbenzene	2.0	U	
1330-20-7	Xylenes (total)	5.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB-728-01

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 52761

TRIP BLANK

Matrix: (soil/water) WATER Lab Sample ID: 52761016

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: SM106

Level: (low/med) LOW Date Received: 12/02/01

% Moisture: not dec. _____ Date Analyzed: 12/03/01

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	2.0	U	U
108-88-3	Toluene	0.19	J	J
100-41-4	Ethylbenzene	2.0	U	U
1330-20-7	Xylenes (total)	5.0	U	U

THIS PAGE INTENTIONALLY LEFT BLANK.

NINETEENTH SAMPLING EVENT

FEBRUARY 2002

THIS PAGE INTENTIONALLY LEFT BLANK.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE60K2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y543

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. _____ Date Analyzed: 03/02/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.0	U
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	5.0	U

U ↓

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE61K2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y534

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. _____ Date Analyzed: 03/02/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	3.3	
108-88-3	Toluene	0.21	J
100-41-4	Ethylbenzene	4.7	
1330-20-7	Xylenes (total)	2.2	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE63K2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512014

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y533

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. _____ Date Analyzed: 03/01/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	2.0	U	U
108-88-3	Toluene	0.17	J	J
100-41-4	Ethylbenzene	2.0	U	U
1330-20-7	Xylenes (total)	5.0	U	U

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AER6K2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y540

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. _____ Date Analyzed: 03/02/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	0.64	J	J
108-88-3	Toluene	0.30	J	J
100-41-4	Ethylbenzene	3.9		J
1330-20-7	Xylenes (total)	1.3	J	

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED4K2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56386

Matrix: (soil/water) WATER Lab Sample ID: 56386002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y547

Level: (low/med) LOW Date Received: 02/20/02

% Moisture: not dec. _____ Date Analyzed: 03/02/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	14.2		=
108-88-3	Toluene		~~0.75~~	J	U F04, F06
100-41-4	Ethylbenzene		3.8		=
1330-20-7	Xylenes (total)		0.60	J	J

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED6K2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y538

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. _____ Date Analyzed: 03/02/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	89.3		
108-88-3	Toluene	0.51	J	J
100-41-4	Ethylbenzene	14.3		
1330-20-7	Xylenes (total)	8.7		

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED7K2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Z122

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. _____ Date Analyzed: 03/04/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

USE

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene		164		=
108-88-3	Toluene		1.8	J	J
100-41-4	Ethylbenzene	190	~~221~~	~~E~~ D	=
1330-20-7	Xylenes (total)		181		=

DATA VALIDATION COPY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED9K2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56386

Matrix: (soil/water) WATER Lab Sample ID: 56386001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Z121

Level: (low/med) LOW Date Received: 02/20/02

% Moisture: not dec. _____ Date Analyzed: 03/04/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

USQ

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	924		=
108-88-3	Toluene	26.8		= F04,F08
100-41-4	Ethylbenzene	791		=
1330-20-7	Xylenes (total)	2560 ~~2110~~	E D	=

DATA VALIDATION
COPY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED0K2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y535

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. ______ Date Analyzed: 03/02/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: ______ (uL) Soil Aliquot Volume: ______ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	3.4		=
108-88-3	Toluene	0.23	J	J
100-41-4	Ethylbenzene	1.4	J	J
1330-20-7	Xylenes (total)	3.0	J	J

FORM I VOA

DATA VALIDATION COPY

OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDBK2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y539

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. _____ Date Analyzed: 03/02/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	3.8	
108-88-3	Toluene	0.20	J
100-41-4	Ethylbenzene	0.37	J
1330-20-7	Xylenes (total)	0.85	J

11444

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDDK2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y541

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. _____ Date Analyzed: 03/02/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	64.1	
108-88-3	Toluene	0.54	J
100-41-4	Ethylbenzene	8.7	
1330-20-7	Xylenes (total)	32.6	

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDGK2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y542

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. _____ Date Analyzed: 03/02/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	4.7	
108-88-3	Toluene	0.20	J
100-41-4	Ethylbenzene	0.49	J
1330-20-7	Xylenes (total)	5.0	U

DATA VALIDATION COPY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDJK2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y545

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. ______ Date Analyzed: 03/02/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: ______ (uL) Soil Aliquot Volume: ______ (uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	54.4		=
108-88-3	Toluene	0.51	J	J
100-41-4	Ethylbenzene	13.4		=
1330-20-7	Xylenes (total)	2.3	J	J

FORM I VOA

DATA VALIDATION
COPY

OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP1K2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y546

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. _____ Date Analyzed: 03/02/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	1.5	J	J
108-88-3	Toluene	2.0	U	U
100-41-4	Ethylbenzene	2.0	U	U
1330-20-7	Xylenes (total)	0.62	J	J

DATA VALIDATION COPY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP2K2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y537

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. _____ Date Analyzed: 03/02/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	0.51	J	J
108-88-3	Toluene	2.0	U	U
100-41-4	Ethylbenzene	2.0	U	U
1330-20-7	Xylenes (total)	5.0	U	U

DATA VALIDATION COPY

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP4K2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y536

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. _____ Date Analyzed: 03/02/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.0	U
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	5.0	U

u ↓

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HP0045

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56386

(TRIP BLANK)

Matrix: (soil/water) WATER Lab Sample ID: 56386003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y531

Level: (low/med) LOW Date Received: 02/20/02

% Moisture: not dec. _____ Date Analyzed: 03/01/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	2.0	U	U
108-88-3	Toluene	0.17	J	J
100-41-4	Ethylbenzene	2.0	U	U
1330-20-7	Xylenes (total)	5.0	U	U

DATA VALIDATION COPY

FORM I VOA OLM03.0

Trip Blank

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HP0046

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 56512

Matrix: (soil/water) WATER Lab Sample ID: 56512015

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2Y532

Level: (low/med) LOW Date Received: 02/22/02

% Moisture: not dec. _____ Date Analyzed: 03/01/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	2.0	U	U
108-88-3	Toluene	2.0	U	
100-41-4	Ethylbenzene	2.0	U	
1330-20-7	Xylenes (total)	5.0	U	

DATA VALIDATION COPY

TWENTIETH SAMPLING EVENT

APRIL 2002

THIS PAGE INTENTIONALLY LEFT BLANK.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE60M2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F133

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	2.0	U	u
108-88-3	Toluene	2.0	~~0.26~~	JB	u F01, F06
100-41-4	Ethylbenzene		2.0	U	u
1330-20-7	Xylenes (total)		5.0	U	u

DATA VALIDATION COPY

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE61M2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771014

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F135

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	2.0	U	U
108-88-3	Toluene		~~0.29~~	JB	U F01,F06
100-41-4	Ethylbenzene		2.0	U	U
1330-20-7	Xylenes (total)		5.0	U	U

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE63M2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771015

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F136

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	2.0	U	U
108-88-3	Toluene	2.0	~~0.29~~	JB	U F01,F06
100-41-4	Ethylbenzene		2.0	U	U
1330-20-7	Xylenes (total)		5.0	U	U

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AER6M2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F212

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	0.62	J	b U F01,F06
108-88-3	Toluene		~~0.30~~	JB	
100-41-4	Ethylbenzene		19.8		
1330-20-7	Xylenes (total)		3.8	J	

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED4M2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771017

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F138

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	27.5		U F01,F06
108-88-3	Toluene		~~0.71~~	JB	
100-41-4	Ethylbenzene		4.4		U
1330-20-7	Xylenes (total)		2.9	J	U

DATA VALIDATION COPY

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED6M2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F211

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	29.9		U F01, F06
108-88-3	Toluene		~~0.52~~	JB	
100-41-4	Ethylbenzene		6.7		U
1330-20-7	Xylenes (total)		12.4		U

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED7M2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F214

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	85.8		
108-88-3	Toluene	4.0 ~~1.2~~	JB	U F01, F06
100-41-4	Ethylbenzene	158		
1330-20-7	Xylenes (total)	81.6		

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED9M2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F215

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 10.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	817	
108-88-3	Toluene	23.6	B
100-41-4	Ethylbenzene	692	
1330-20-7	Xylenes (total)	1850	

F01, F08

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED0M2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F213

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	6.1		=
108-88-3	Toluene		~~0.19~~	JB	U F01,F06
100-41-4	Ethylbenzene		1.7	J	J
1330-20-7	Xylenes (total)		6.2		=

DATA VALIDATION COPY

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDBM2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F210

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	3.3		=
108-88-3	Toluene		~~0.27~~	JB	U F01, F06
100-41-4	Ethylbenzene		6.4		=
1330-20-7	Xylenes (total)		19.7		=

DATA VALIDATION COPY

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDDM2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F132

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene	2.0	31.8		=
108-88-3	Toluene		~~0.54~~	JB	U F01, F06
100-41-4	Ethylbenzene		13.1		=
1330-20-7	Xylenes (total)		47.9		=

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDGM2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F209

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
71-43-2	Benzene	2.0	6.7	
108-88-3	Toluene		~~0.38~~	JB
100-41-4	Ethylbenzene		8.1	
1330-20-7	Xylenes (total)		25.4	

U F01, F06

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDJM2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771016

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F137

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/16/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene		49.0		=
108-88-3	Toluene	2.0	~~0.69~~	JB	U F01,F06
100-41-4	Ethylbenzene		19.1		=
1330-20-7	Xylenes (total)		24.0		=

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP1M2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F134

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene		1.5	J	
108-88-3	Toluene	2.0	~~0.21~~	JB	U F01, F06
100-41-4	Ethylbenzene		0.68	J	
1330-20-7	Xylenes (total)		2.5	J	

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP2M2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F130

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene		0.31	J	J
108-88-3	Toluene	2.0	~~0.32~~	JB	U F01, F06
100-41-4	Ethylbenzene		0.48	J	J
1330-20-7	Xylenes (total)		1.6	J	J

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP4M2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F131

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene		0.69	J	J
108-88-3	Toluene	2.0	~~0.27~~	JB	U F01,F02
100-41-4	Ethylbenzene		1.3	J	J
1330-20-7	Xylenes (total)		4.2	J	J

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HPD015 TRIP BLANK

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 58771

Matrix: (soil/water) WATER Lab Sample ID: 58771001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 2F129

Level: (low/med) LOW Date Received: 04/11/02

% Moisture: not dec. _____ Date Analyzed: 04/15/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q	
71-43-2	Benzene		2.0	U	u
108-88-3	Toluene	2.0	~~0.26~~	JB	U F01,F06
100-41-4	Ethylbenzene		2.0	U	u
1330-20-7	Xylenes (total)		5.0	U	u

DATA VALIDATION COPY

THIS PAGE INTENTIONALLY LEFT BLANK.

TWENTY-FIRST SAMPLING EVENT

JUNE 2002

THIS PAGE INTENTIONALLY LEFT BLANK.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE60N2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802001

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70531

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/21/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.0	U
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	5.0	U

u

COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE61N2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802009

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70523

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/21/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	7.8		
108-88-3	Toluene	2.0	U	
100-41-4	Ethylbenzene	4.8		
1330-20-7	Xylenes (total)	5.8		

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AE63N2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802003

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70533

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/21/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	0.41	J	J
108-88-3	Toluene	2.0	U	U
100-41-4	Ethylbenzene	2.0	U	
1330-20-7	Xylenes (total)	5.0	U	

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AER6N2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802012

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70540

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/22/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.5	J
108-88-3	Toluene	2.0	
100-41-4	Ethylbenzene	27.5	
1330-20-7	Xylenes (total)	34.0	

J in

DATA VALIDATION COPY

Duplicate

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AER6N4

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802005

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70535

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/22/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	1.4	J
108-88-3	Toluene	2.0	
100-41-4	Ethylbenzene	26.9	
1330-20-7	Xylenes (total)	33.8	

J = 1

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED4N2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802016

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70544

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/22/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	69.5	
108-88-3	Toluene	2.0	
100-41-4	Ethylbenzene	8.6	
1330-20-7	Xylenes (total)	3.1	J

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED6N2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802010

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70539

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/22/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	143	
108-88-3	Toluene	1.1	J
100-41-4	Ethylbenzene	47.8	
1330-20-7	Xylenes (total)	61.7	

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED7N2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802008

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70538

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/22/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 2.0

Soil Extract Volume:_____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	61.8	
108-88-3	Toluene	0.96	J
100-41-4	Ethylbenzene	127	
1330-20-7	Xylenes (total)	112	

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED9N2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802019

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70547

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/22/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 20.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	574		11
108-88-3	Toluene	15.7	J	11
100-41-4	Ethylbenzene	506		11
1330-20-7	Xylenes (total)	1690		

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AED0N2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802014

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70542

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/22/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.0	U
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	5.0	U

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDBN2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802007

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70537

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/22/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	2.0	U	u
108-88-3	Toluene	2.0	U	
100-41-4	Ethylbenzene	2.0	U	
1330-20-7	Xylenes (total)	5.0	U	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDDN2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802002

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70532

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/21/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	7.7		
108-88-3	Toluene	2.0	U	
100-41-4	Ethylbenzene	1.6	J	
1330-20-7	Xylenes (total)	3.5	J	

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDGN2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802017

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70545

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/22/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	1.2	J	4
108-88-3	Toluene	2.0	U	4
100-41-4	Ethylbenzene	1.1	J	4
1330-20-7	Xylenes (total)	1.6	J	4

DATA VALIDATION COPY

FORM I VOA OLM03.0

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEDJN2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802006

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70536

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/22/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	14.9	
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	3.9	
1330-20-7	Xylenes (total)	0.70	J

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP1N2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802013

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70541

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/22/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.0	U
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	5.0	U

u

DATA VALIDATION COPY

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP2N2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802015

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70543

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/22/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	0.35	J
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	5.0	U

J U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

AEP4N2

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802018

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70546

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/22/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	2.0	U	u
108-88-3	Toluene	2.0	U	↓
100-41-4	Ethylbenzene	2.0	U	
1330-20-7	Xylenes (total)	5.0	U	

DATA VALIDATION COPY

Trip Blank

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HP0047

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802011

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70524

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/21/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	
71-43-2	Benzene	2.0	U	u
108-88-3	Toluene	2.0	U	
100-41-4	Ethylbenzene	2.0	U	
1330-20-7	Xylenes (total)	5.0	U	

DATA VALIDATION COPY

Trip Blank

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

HP0048

Lab Name: GENERAL ENGINEERING LABOR Contract: N/A

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 61802

Matrix: (soil/water) WATER Lab Sample ID: 61802004

Sample wt/vol: 5.000 (g/ml) ML Lab File ID: 70534

Level: (low/med) LOW Date Received: 06/10/02

% Moisture: not dec. _____ Date Analyzed: 06/21/02

GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
71-43-2	Benzene	2.0	U
108-88-3	Toluene	2.0	U
100-41-4	Ethylbenzene	2.0	U
1330-20-7	Xylenes (total)	5.0	U

u

DATA VALIDATION COPY

THIS PAGE INTENTIONALLY LEFT BLANK.

APPENDIX VI

SITE RANKING FORM

THIS PAGE INTENTIONALLY LEFT BLANK.

SITE RANKING FORM

Facility Name: **Former Building 728** **Ranked by:** **S. Stoller**

County: **Chatham** **Facility ID #:** **9-025049** **Date Ranked:** **7/26/2002**

SOIL CONTAMINATION

A. Total PAHs –
Maximum Concentration found on the site
(Assume <0.660 mg/kg if only gasoline was stored on site)

☐	≤0.660 mg/kg	=	0
☐	>0.66 - 1 mg/kg	=	10
☐	>1 - 10 mg/kg	=	25
* ☒	>10 mg/kg	=	50

** 1997 CAP-Part B sample WB5901 at 4' – 6'*

B. Total Benzene -
Maximum Concentration found on the site

☐	≤0.005 mg/kg	=	0
☐	>0.005 - .05 mg/kg	=	1
☐	>0.05 - 1 mg/kg	=	10
☐	>1 - 10 mg/kg	=	25
☐	>10 - 50 mg/kg	=	40
* ☒	>50 mg/kg	=	50

** 1997 CAP-Part B sample WB5901 at 4' – 6'*

C. Depth to Groundwater
(bls = below land surface)

☐	>50' bls	=	1
☐	>25' - 50' bls	=	2
☐	>10' - 25' bls	=	5
☒	≤10' bls	=	10

Fill in the blanks: **(A. 50) + (B. 50) = (100) x (C. 10) = (D. 1000)**

GROUNDWATER CONTAMINATION

E. Free Product (Nonaqueous-phase liquid hydrocarbons; See Guidelines For definition of "sheen").

☒	No free product	=	0
☐	Sheen - 1/8"	=	250
☐	>1/8" - 6"	=	500
☐	>6" - 1ft.	=	1,000
☐	For every additional inch, add another 100 points = 1,000 + 12,000		

F. Dissolved Benzene -
Maximum Concentration at the site
(One well must be located at the source of the release.)

☐	≤5 µg/L	= 0
☐	>5 - 100 µg/L	= 5
* ☒	>100 - 1,000 µg/L	= 50
☐	>1,000 - 10,000 µg/L	= 500
☐	>10,000 µg/L	= 1500

** June 2002 Corrective Action Sample (D9)*

Fill in the blanks: **(E. 0) + (F. 50) = (G. 50)**