2004 ANNUAL MONITORING REPORT
BUILDING 820
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

Prepared for:

DEPARTMENT OF THE NAVY
Naval Facilities Engineering Command, Atlantic Division



Building C, 3rd Floor
6506 Hampton Boulevard
Norfolk, Virginia 23508-1278

Prepared by:



11560 Great Oaks Way, Suite 500
Alpharetta, GA 30022-2424

Task Order 010
Shaw Project No. 110385

July 2005

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Prepared by:

Shaw Environmental, Inc.
11560 Great Oaks Way, Suite 500
Alpharetta, GA 30022

NORTH CAROLINA REVIEWED BY LICENSED SEAL 1238 GEOLOGIST ROBERT S. BROWN

7/12/05

Robert S. Brown, L.G.
Licensed Geology Number 1238

Ronald B. Kenyon
Project Manager

Roland Moreau, P.E.
Program Manager

July 2005
Shaw Project No. 110385

TABLE OF CONTENTS

1.0 INTRODUCTION 1-1
1.1 Camp Lejeune Marine Corp Base Location and Description 1-1
1.2 Building 820 Site Description 1-1
1.3 Site Geology/Hydrogeology 1-2

2.0 CONTAMINATION INVESTIGATION HISTORY 2-1
2.1 Building 820 Area 2-1
2.2 Corrective Action Plan 2-1
2.3 Remedial Action Optimization and Revised Cap 2-3

3.0 AS/SVE REMEDIAL SYSTEM OPERATION AND RESULTS .. 3-1
3.1 AS/SVE System Operation 3-1
3.2 AS/SVE System Monitoring Results 3-2

4.0 GROUNDWATER MONITORING METHODS AND RESULTS 4-1
4.1 Groundwater Elevation Measurements 4-1
4.1.1 April 2004 Gauging Event 4-1
4.1.2 November 2004 Gauging Event 4-1
4.2 Groundwater Sampling and Analysis 4-2
4.2.1 April 2004 Groundwater Analytical Results 4-2
4.2.2 November 2004 Groundwater Analytical Results 4-3

5.0 CONCLUSIONS 5-1
5.1 AS/SVE System Operation 5-1
5.2 Groundwater Elevation Measurements 5-1
5.3 Groundwater Analytical Conclusions 5-2

6.0 RECOMMENDATIONS 6-1
6.1 AS/SVE System 6-1
6.2 Groundwater Level Measurements 6-1
6.3 Groundwater Sample Collection and Analysis 6-1

FIGURES

Figure 1.1: Vicinity Map
Figure 1.2: Location Map
Figure 2.1: Site Map/Remedial System Layout
Figure 4.1: Groundwater Elevation Contour Map, Type II Wells
Figure 4.2: Groundwater Elevation Contour Map, Type III Wells
Figure 4.3: Benzene Concentrations in Groundwater, Type II Wells
Figure 4.4: Ethylbenzene Concentrations in Groundwater, Type II Wells
Figure 4.5: Toluene Concentrations in Groundwater, Type II Wells
Figure 4.6: MTBE Concentrations in Groundwater, Type II Wells
Figure 4.7: Total Xylenes Concentrations in Groundwater, Type II Wells
Figure 4.8: Benzene Concentrations in Groundwater, Type III Wells
Figure 4.9: Ethylbenzene Concentrations in Groundwater, Type III Wells
Figure 4.10: Toluene Concentrations in Groundwater, Type III Wells
Figure 4.11: MTBE Concentrations in Groundwater, Type III Wells
Figure 4.12: Total Xylenes Concentrations in Groundwater, Type III Wells

Tables

Table 2.1: Site Rehabilitation Goals
Table 3.1: Cumulative Mass of Volatile Hydrocarbons Recovery
Table 3.2: Cumulative Mass of Volatile Hydrocarbons Recovery Graph
Table 4.1: Groundwater Elevation Table
Table 4.2: Shallow Well Analytical Data Summary, April 2004
Table 4.3: Deep Well Analytical Data Summary, April 2004
Table 4.4: Shallow Well Analytical Data Summary, November 2004
Table 4.5: Deep Well Analytical Data Summary, November 2004
Table 6.1: First and Fourth Quarter Groundwater Sampling and Analysis
Table 6.2: Second and Third Quarter Groundwater Sampling and Analysis

Appendix A: Water Supply Well Analytical Results
Appendix B: Groundwater Sample Collection Field Logs
Appendix C: April 2004 Groundwater Laboratory Analytical Reports
Appendix D: November 2004 Groundwater Laboratory Analytical Reports
Appendix E: Historical Groundwater Analytical Results
Appendix F: Groundwater Elevation vs. BTEX Concentration Graphs

LIST OF ACRONYMS AND ABBREVIATIONS

AS	Air Sparge
bls	below land surface
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
CAP	Corrective Action Plan
COCs	Contaminants of Concern
DRO	TPH-Diesel Range Organics
EPA	Environmental Protection Agency
GRO	TPH-Gasoline Range Organics
LAW	Law Engineering and Environmental Services
Lb/day	Pounds per day
MCB	Marine Corps Base
mg/L	milligrams per liter
MTBE	Methyl Tert Butyl Ether
mV	Millivolt
MW	Monitoring Well
NCAC	North Carolina Administrative Code
NGVD	National Geodetic Vertical Datum
NTUs	Nephelometric Turbidity Units
ORP	Oxidation Reduction Potential
PAH	Polynuclear Aromatic Hydrocarbon
SVE	Soil Vapor Extraction
TOC	Total Organic Carbon
TPH	Total Petroleum Hydrocarbons
ug/L	micrograms per liter
umhos	Micromhos
UST	Underground Storage Tank
VOAs	Volatile Organic Analysis
VOHs	Volatile Organic Halogens

TITLE PAGE

The facility name, UST owner, UST operator, and UST information are provided below:

UST Incident Number: 23135

ID Number: Not Applicable

Risk Classification: Intermediate

UST Owner: Commanding General, MCB
I&E/EMD/EQB
PSC Box 20004
Onslow County
Camp Lejeune, NC 28542
(910) 451-5068

UST Operator: Commanding General, MCB
I&E/EMD/EQB
PSC Box 20004
Onslow County
Camp Lejeune, NC 28542
(910) 451-5068

Primary Responsible Party Contact: Nikki Hall
Environmental Engineer
I&E/EMD/EQB
PSC Box 20004
Onslow County
Camp Lejeune, NC 28542
(910) 451-5068

Date of Release: Unknown
Quanity of Release: Unknown
Source of Release: USTs/Line Leak
Latitude and Longitude: 34° 42' 0.662077" N
77° 21' 16.0669" W

Tank Number	Installation Date	Tank Capacity	Tank Dimensions	Last Dimensions	Previous Contents
820-1	Unknown	10000	Unknown	Gasoline	Unknown
820-2	Unknown	10000	Unknown	Gasoline	Unknown
820-3	Unknown	10000	Unknown	Gasoline	Unknown
820-4	Unknown	10000	Unknown	Diesel	Unknown

1.0 INTRODUCTION

This report describes the performance results and groundwater analytical results for calendar year 2004 of the Air Sparge (AS)/Soil Vapor Extraction (SVE) treatment system installed at Building 820 located at Marine Corps Base (MCB) Camp Lejeune, North Carolina. The system was installed to remediate a release of petroleum. This report is submitted in accordance with the requirements of the *Corrective Action Plan (CAP)* dated October 29, 1996, as well as *Groundwater Section Guidelines for Assessment and Corrective Action, North Carolina, Underground Storage Tanks*, published by the State of North Carolina Department of Environment and Natural Resources (NCDENR), Division of Waste Management, UST Section, dated April 2001.

The report provides a brief overview of the environmental history of the site, summarizes the CAP, and describes the installation and operation of the recommended remedial alternative. The report provides a discussion of monitoring results of system operation and the current status of groundwater quality compared to baseline data. In accordance with recommendations presented in the *Remedial Action Optimization and Revised Corrective Action Plan Building 820*, prepared by CATLIN Engineers and Scientists, dated February 26, 2004 a portion of the AS/SVE system was shutdown June 11, 2004. The report also presents conclusions about remedial progress to date and makes recommendations for further site monitoring.

1.1 CAMP LEJEUNE MARINE CORP BASE LOCATION AND DESCRIPTION

Located in Onslow County, North Carolina, MCB Camp Lejeune is a training base for the United States Marine Corps. The base covers approximately 236 square miles (153,000 acres) and includes 14 miles of coastline. MCB Camp Lejeune is bounded to the southeast by the Atlantic Ocean and to the northeast by State Route 24. Wooded areas are located north, east, and west of the site. The town of Jacksonville, North Carolina, is located north of the base (*Figure 1.1).*

1.2 BUILDING 820 SITE DESCRIPTION

Building 820 is located in the Berkeley Manor residential area of the Marine Corps Base, Camp Lejeune, Onslow County, North Carolina (*Figure 1.2*). The site is located on the west side of Stone Street. The site is determined to be a Category B site under the State's Site Priority Ranking System.

Building 820 is currently an active Marine Corps Exchange gas station. Four underground storage tanks (USTs) are located south of the building. These include three 10,000-gallon gasoline USTs and one 10,000-gallon diesel UST. The USTs were upgraded in the late summer of 1995.

1.3 SITE GEOLOGY/HYDROGEOLOGY

The project area is dominated by relatively flat topography gently sloping to the south toward Wallace Creek and west toward New River. Much of the area immediately surrounding Building 820 consists of asphalt parking lot with wooded areas to the west and south and residential areas to the east. The nearest mapped bodies of surface water are New River approximately one mile to the west and Wallace Creek approximately one mile to the south. Surface water runoff from the site is diverted into a network of storm drains located at the site. Storm water collected by this system of drains ultimately discharges to the New River.

Sediment and stratigraphy in the vicinity of the site indicates that near surface soils within 6 to 8 feet below land surface (bls) generally consist of sandy clays to clayey fine sands with occasional fine sand or clay lenses. Below the surficial material, soils generally consist of relatively clean fine to medium sands to a depth of approximately 50 feet.

The groundwater aquifer is classified as a Class GA groundwaters according to the North Carolina Administrative Code (NCAC) Title 2L Subchapter 15A, Section .0201 Groundwater Classifications. Depth to groundwater ranges from 7 to 12 feet bls in shallow Type II monitoring wells and 10 to 18 feet bls in 50-feet deep Type III monitoring wells. In general, the surficial direction of groundwater flow at the site is to the south, while the deeper zone (i.e., 50 feet bls) flows to the north.

2.0 CONTAMINATION INVESTIGATION HISTORY

2.1 BUILDING 820 AREA

In the early 1990s, several environmental investigations were carried out in the vicinity of Building 820. Type II wells were installed to investigate the presence of free product and dissolved contaminants in shallow groundwater. Type III wells were installed to investigate conditions deeper in the aquifer at depths as great as 50 feet bls.

Petroleum constituents were detected in both the shallow (Type II) and deep (Type III) wells. Plumes of dissolved petroleum constituents in excess of North Carolina Groundwater Quality Standards were identified in both zones. These constituents included benzene, toluene, ethylbenzene, and xylene (BTEX); and methyl tertiary butyl ether (MTBE).

In both zones, the plumes appeared to originate from the vicinity of the USTs. The plumes appeared to extend primarily to the south (the inferred direction of groundwater flow) for approximately 250 feet, with some lateral migration approximately 150 feet to the west. Near the point of origin, the concentration of dissolved Total BTEX was initially detected at concentrations as high as 157,500 micrograms per liter (ug/L). This concentration is near the saturation level for these compounds.

A passive free product recovery system installed at the site recovered approximately 43 gallons of free product from March 1994 through February 1997. In response to a NCDENR request dated June 8, 2001, additional soil samples were collected in the vicinity of the fuel dispensers and fuel lines. The samples were analyzed for the presence of hydrocarbons by Environmental Protection Agency (EPA) Method 5035/8015B and by MADEP Methods for VPH. All soil analytical results were below the NCDENR guidelines. A letter report presenting results of the additional soil investigation was submitted August 24, 2001.

2.2 CORRECTIVE ACTION PLAN

Law Engineering and Environmental Services, Inc. (LAW) prepared a CAP dated October 29, 1996. Two potential receptors were identified at greatest apparent risk. One consists of two tributaries of Wallace Creek located approximately 1,500 feet south of the site. The other potential receptor is a drinking water supply well (well HP-623) located

approximately 1,300 feet north east of the site (*Figure 1.2*). This well was sampled in December 2004. Analytical results yielded non-detect results for volatile organic compounds using EPA Method 524.2 during the sampling event. *Appendix A* provides an analytical results summary report of 64 water supply wells that are sampled annually at the base.

Several remedial objectives were developed for the site. They were:

- Primary Source(s): Eliminate future releases through closure or integrity testing and upgrading the existing UST system at Building 820.
- Secondary Sources:
  - i) Free Product: Remove free product to less than or equal to 1/8 inch as measured in free product recovery wells and groundwater monitoring wells.
  - ii) Vadose Zone Soil Contamination: Reduce TPH in soil to 10 part per million (ppm) as measured by EPA Method 5030 (TPH-Gasoline Range Organics [GRO]) and 40 ppm as measured by EPA Method 3550 (TPH-Diesel Range Organics [DRO]).
- Dissolved-phase Groundwater Contamination: Restore groundwater to quality consistent with North Carolina groundwater quality standards. *Table 2.1* presents the analytes of concern and their respective target concentrations in groundwater.
- Receptor Protection: Monitor surface waters in Wallace Creek tributaries to ensure that no violation of North Carolina surface water quality standards occurs due to this release.

LAW evaluated two alternative remedial strategies for the site. An SVE and an air sparge pilot test were conducted east of Stone Street in the vicinity of monitoring wells MW7 and MW8. Based on these studies, LAW recommended a combination of treatment technologies to meet the remedial goals at the site. These technologies included:

- Four fields of AS wells. The AS wells would be installed in areas displaying high concentrations of dissolved-phase petroleum constituents to remediate these constituents and prevent further migration of the plume. Their screened intervals would be placed from 47 to 50 feet bls to remediate the dissolved petroleum constituents in the Type II and Type III well zones.

- Four fields of SVE wells, with an individual SVE point located near each AS well. The SVE wells would remove any residual free product, capture fugitive emissions resulting from the air sparging, and remediate any adsorbed-phase petroleum in that portion of the vadose zone within each well's radius of influence.

The CAP estimated that the system would have to operate for 20 years from startup to successfully remediate the dissolved groundwater plume. Following approval of the CAP, the AS/SVE portion of the system was installed in 1997. The system was placed in operation during October 1997. The locations of the well fields and the treatment compound are shown in *Figure 2.1*.

2.3 REMEDIAL ACTION OPTIMIZATION AND REVISED CAP

CATLIN Engineers and Scientists submitted a CAP Addendum to the NCDENR titled "*Remedial Action Optimization* and *Revised Corrective Action Plan Building 820*" dated February 26, 2004. The addendum was prepared following a thorough review of available reports and field data since the AS/SVE remedial system was placed in operation as well as a field reconnaissance and interviews with the system operators.

The potential receptors were re-evaluated during preparation of the RCAP using the North Carolina Risk Classification and Land Use Form. Based on the risk characterization, it was determined that the site meets the criteria to be classified as an Intermediate Risk and Residential Land Use site. A receptor survey performed during the risk characterization identified the following receptors within 1,500 feet of the site:

- A potable water supply well 623 located approximately 1,300 feet northeast of the site.
- A tributary of Wallace Creek located approximately 1,200 feet southeast of the site.
- The site is located in an area in which there is potential recharge to the deeper aquifer being used by the potable supply well. The Well Head Protection Plan Update (2002) stated water supply well 623 is 197 feet deep with the pump depth set at 70 feet bls.
- The site is located within a potential well head protection area.
- The closest residence is approximately 400 feet east of the site.
- A youth Sports and Activities Center and a playground are located approximately 300 feet from the site.

- Athletic fields associated with a middle school are located approximately 500 feet northeast of the site.

Based on information provided by MCB Camp Lejeune, these potential receptors have not been reported to have been adversely affected by the potentially contaminated soil and/or groundwater.

The intermediate risk is based on the location of the potable water supply well 623 and the deep groundwater contamination at the site. This ranking revises the target cleanup goals for soil to Residential Maximum Soil Contaminant Concentrations (MSCCs). Groundwater target cleanup goals remain unchanged from the original CAP (i.e., 2L GWQS). A Notice of Residual Petroleum is not required for the site at this time.

Recommendations of the Revised CAP included:

- Collection of soil samples from the capillary fringe at six locations for Risk Based Analysis.
- Shutting down a portion of the current groundwater remediation system.
- Quarterly groundwater sample collection from shallow monitoring wells (MW-8, MW-10, MW-14, MW-18, MW-20, MW-22, MW-24 and MW-26. The groundwater samples are to be analyzed for VOCs using EPA Method 602 plus xylenes, SVOCs using EPA Method 625 for PAH compounds only, and Standard Prep Method 3030C for lead.
- Install two 50-feet deep Type III monitoring wells.
- Shutdown and properly abandon water supply well 623.
- Quarterly groundwater sample collection from deep monitoring wells (MW-7, MW-19, MW-21, MW-23, MW-25, plus the two additional deep monitoring wells). The groundwater samples are to be analyzed for VOCs using EPA Method 602 plus xylenes, SVOCs using EPA Method 625 for PAH compounds only, and Standard Prep Method 3030C for lead.
- Semi-annual groundwater sample collection from deep monitoring well MW-9D. The groundwater sample is to be analyzed for VOCs using EPA Method 602 plus xylenes, SVOCs using EPA Method 625 for PAH compounds only, and Standard Prep Method 3030C for lead.

3.0 AS/SVE REMEDIAL SYSTEM OPERATION AND RESULTS

3.1 AS/SVE SYSTEM OPERATION

System operation began in October 1997 and has continued to the present. During the first 15 months of operation, the AS/SVE fields were operated alternately to attempt to optimize the initial remediation. Since that time, all fields have been operated concurrently. On occasion, it has been necessary to intermittently shut down one or more fields (most commonly Fields 1 and 3) due to the effect of high groundwater conditions on SVE operations (i.e., groundwater entrainment).

This report discusses the system's operation and the monitoring results collected from January 2004 through December 2004. A portion of the system (i.e., AS/SVE well pairs 1, 5, 6, 7, 8, 12, 13, 14, 21, 22, 23, 24, 25, 30, 31, 32, 33, 34, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, and 48) was shutdown June 11, 2004 in accordance with recommendations presented in the Revised Corrective Action Plan prepared by CATLIN dated February 2004. During this operating time period no significant downtimes (exceeding several days) occurred. Minor downtime periods ranging from one day to a few days duration, occurred as a result of excessive groundwater entrainment, minor equipment repairs, routine maintenance, and groundwater monitoring events. The remedial system was in operation a total of 338 days during 2004 for an operational efficiency of 93 percent.

An operational and maintenance schedule has been established to obtain consistent system measurements and notes on system performance. With the exception of some holidays and severe short duration storms, the equipment compound was inspected every weekday that the system was in operation. During site inspection, a checklist is used to record operational measurements and conditions, such as vacuum blower meter hours, inlet filter differential pressure, and bleed air valve position. This information is used to identify areas requiring maintenance (such as filter replacement) and to fine-tune system operation.

The AS/SVE fields were inspected weekly. Included in this work was an inspection of each well vault. System components were checked and measurements such as vacuum, air velocity, and temperature were recorded. As with the equipment compound, these inspections helped to identify maintenance needs. Expanded compound measurements, including specific recovery conditions, were recorded concurrently with the weekly inspection of well vaults.

3.2 AS/SVE SYSTEM MONITORING RESULTS

Hydrocarbon recovery for the system is calculated from system operational parameters such as organic vapor concentrations, exhaust stack pressure, velocity, and temperature. These parameters are used to calculate the cumulative mass of hydrocarbons recovered.

Operational data collection for the AS/SVE system began on October 28, 1997, and has continued at regular intervals to the present. For purposes of this report, system operation data and results have been reviewed from startup through December 31, 2004. Within this period of operation, the system has recovered a cumulative mass of 20,240 pounds of hydrocarbons. From January 2004 through December 2004, approximately 770 pounds of hydrocarbons were recovered by the remedial system. Hydrocarbon vapor recovery data is provided in *Table 3.1* and graphically presented in *Table 3.2*.

Hydrocarbon recovery rates ranged from 6.3 pounds per day (lbs/day) to <1 lb/day when the system was operating. The average recovery rate decreased from 3.8 lb/day observed in 2003 to 2.0 lbs/day in 2004. This is probably due to a combination of decreasing contaminant concentrations at the site and shutting down a portion of the AS/SVE system discussed in Section 3.1.

Other than shutting down a portion of the AS/SVE treatment and recovery system, no major changes were made to the system configuration from January through December 2004.

4.0 GROUNDWATER MONITORING METHODS AND RESULTS

Groundwater elevations at select monitoring wells were measured during each groundwater sampling event (April and November 2004). *Table 4.1* presents groundwater elevation data dating back to September 2001. *Figures 4.1 and 4.2* present groundwater elevation contour maps from the Type II (shallow) and Type III (deep) monitoring wells respectively. Groundwater elevations, on average, increased 1 to 2 feet in 2004 from levels observed in 2003, continuing the rising groundwater elevation trend that began in 2002.

In addition, groundwater samples from select monitoring wells at the site were collected for analysis in April and November 2004. The groundwater sample collection field logs are provided in *Appendix B.*

4.1 GROUNDWATER ELEVATION MEASUREMENTS

4.1.1 APRIL 2004 GAUGING EVENT

In April 2004 the depth to groundwater from top of casing was gauged in 14 Type II monitoring wells at the site. The depth to groundwater ranged from 7.54 feet bls in monitoring well MW-15 to 12.51 feet bls in monitoring well MW-14. Groundwater elevations ranged from 16.02 feet National Geodedic Vertical Datum (NGVD) in monitoring well MW-8 to 22.92 feet NGVD in monitoring well MW-18. No detectable thickness of free product was observed in any of the wells.

Depth to groundwater was also measured in five Type III monitoring wells. The depth to groundwater ranged from 10.04 feet bls in monitoring well MW-7 to 17.72 feet bls in monitoring well MW-17. Groundwater elevations ranged from 14.86 feet NGVD in monitoring well MW-17 to 15.33 feet NGVD in monitoring well MW-7.

4.1.2 NOVEMBER 2004 GAUGING EVENT

In November 2004 the depth to groundwater from top of casing was gauged in 14 Type II monitoring wells at the site. The depth to groundwater ranged from 9.21 feet bls in monitoring well MW-15 to 14.26 feet bls in monitoring well MW-14. Groundwater elevations ranged from 14.19 feet NGVD in monitoring well MW-8 to 20.97 feet NGVD in monitoring well MW-15. No detectable thickness of free product was observed in any of the wells.

Depth to groundwater was also measured in six Type III monitoring wells. The depth to groundwater ranged from 11.85 feet bls in monitoring well MW-7 to 19.61 feet bls in monitoring well MW-17. Groundwater elevations ranged from 12.69 feet NGVD in monitoring well MW-19 to 15.33 feet NGVD in monitoring well MW-7.

4.2 GROUNDWATER SAMPLING AND ANALYSIS

4.2.1 APRIL 2004 GROUNDWATER ANALYTICAL RESULTS

Groundwater sample collection and analysis was completed at 12 Type II monitoring wells (MW-2, MW-4, MW-5, MW-8, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-26 and MW-27) on April 13 through April 20, 2004. The samples were analyzed for Volatile Organic Analysis (VOA) using EPA Method 602 and polynuclear aromatic hydrocarbons (PAHs) using EPA Method 610. Of the 12 monitoring wells sampled, the following wells displayed compounds in excess of North Carolina's Groundwater Quality Standards.

- MW-8 [benzene, 1.4 ug/L]
- MW-11 [benzene, <20 ug/L; ethylbenzene, 31.6 ug/L; xylenes, 2,180 ug/L; and naphthalene, 92.3 ug/L]
- MW-13 [benzene, 12.5 ug/L; ethylbenzene, 145 ug/L; xylenes, 1,290 ug/L; and naphthalene, 48.4 ug/L]
- MW-16 [benzene, 2.4 ug/L]

Groundwater analytical results from the 12 Type II monitoring wells for the April 2004 sampling event are presented in *Table 4.2* and *Figure 4.3 (benzene), Figure 4.4 (ethylbenzene), Figure 4.5 (toluene), Figure 4.6 (MTBE),* and *Figure 4.7 (total xylenes).* The laboratory analytical reports are provided in *Appendix C.*

Groundwater sample collection and analysis was completed at six Type III monitoring wells (MW-7, MW-9, MW-9D, MW-17, MW-19 and MW21) on April 14 through April 20, 2004. The samples were analyzed for VOAs using EPA Method 602 and PAHs using EPA Method 610. Of the six monitoring wells sampled, the following two wells displayed compounds in excess of North Carolina's Groundwater Quality Standards.

- MW-9 [benzene, 1,170 ug/L; MTBE, 2,620 ug/L; ethylbenzene, 225 ug/L; and xylene, 532 ug/l]

- MW-17 [benzene, 181 ug/L; and MTBE, 1,500 ug/L]

Groundwater analytical results from the six Type III monitoring wells for the April 2004 sampling event are presented in *Table 4.3* and *Figure 4.8 (benzene), Figure 4.9 (ethylbenzene), Figure 4.10 (toluene), Figure 4.11 (MTBE),* and *Figure 4.12 (total xylenes).* The laboratory analytical reports are provided in *Appendix C.*

4.2.2 NOVEMBER 2004 GROUNDWATER ANALYTICAL RESULTS

Groundwater sample collection and analysis was completed at the 12 monitoring wells sampled in April 2004 (MW-2, MW-4, MW-5, MW-8, MW-11, MW-12, MW-13, MW-14, MW-15, MW-16, MW-26 and MW-27) plus the six additional monitoring wells (MW-3, MW-6, MW-18, MW-20, MW-22, and MW-24) recommended in the RCAP on November 3 through 30, 2004. The samples were analyzed for VOAs using EPA Method 602, PAHs using EPA Method 610 and lead using SW846-6010B. Of the 18 monitoring wells sampled, the following 9 wells displayed compounds in excess of North Carolina's Groundwater Quality Standards.

- MW-3 [benzene, 42.4 ug/L]
- MW-4 [benzene, 1.6 ug/L]
- MW-6 [benzene, 212 ug/L; ethylbenzene, 1,400 ug/L; total xylenes, 906 ug/L; and naphthalene 268 ug/L]
- MW-8 [benzene, 1.3 ug/L; lead, 27 ug/L]
- MW-11 [benzene, 7.4 ug/L; ethylbenzene, 111 ug/L; total xylenes, 2,450 ug/L; and naphthalene 139 ug/L]
- MW-12 [benzene, 1.9 ug/L]
- MW-13 [benzene, 2.8 ug/L]
- MW-15 [benzene, 2.5 ug/L]
- MW-16 [benzene, 2.6 ug/L]

Groundwater analytical results from the 18 Type II monitoring wells for the November 2004 sampling event are presented in *Table 4.4* and *Figure 4.3 (benzene), Figure 4.4 (ethylbenzene), Figure 4.5 (toluene), Figure 4.6 (MTBE),* and *Figure 4.7 (total xylenes).* The laboratory analytical reports are provided in *Appendix D.*

Groundwater sample collection and analysis was completed at six Type III monitoring wells (MW-7, MW-9, MW-9D, MW-17, MW-19, and MW21) on November 3 through

20, 2004. The samples were analyzed for VOAs using EPA Method 602 and PAHs using EPA Method 610, and lead using SW846-6010B. Of the six monitoring wells sampled, the following two wells displayed compounds in excess of North Carolina's Groundwater Quality Standards.

- MW-9 [benzene, 2,360 ug/L; ethylbenzene, 222 ug/L; and MTBE, 3,930 ug/L]
- MW-17 [benzene, 242, ug/L; and MTBE, 1,760 ug/l]

Groundwater analytical results from the six Type III monitoring wells for the November 2004 sampling event are presented in *Table 4.5* and *Figure 4.8 (benzene), Figure 4.9 (ethylbenzene), Figure 4.10 (toluene), Figure 4.11 MTBE),* and *Figure 4.12 (total xylenes).* The laboratory analytical reports are provided in *Appendix D.*

5.0 CONCLUSIONS

5.1 AS/SVE SYSTEM OPERATION

The southern portion of the AS/SVE system was shutdown in June 2004 in accordance with recommendations presented the RCAP prepared by CATLIN. The average vapor recovery rate of the AS/SVE system decreased from 3.8 lb/day (observed in 2003) to 2 lbs/day in 2004. This decrease is probably the result of a combination of shutting down a portion of the AS/SVE remedial system, increasing groundwater level elevations and continued reduction of contamination in both groundwater and the unsaturated zone. Continued operation of the system will reduce adsorbed phase hydrocarbons in subsurface soil that should result in further reduction of dissolved phase contaminants in groundwater at the site.

The AS/SVE remedial system continues to remove dissolved contaminants from the "shallow" surficial aquifer at the site as evidenced by the continued reduction in the dissolved contaminant concentrations observed during the 2004 monitoring period. As concentrations of contaminants of concern (COCs) in the "shallow" zone continue to decrease, the deeper zones should begin to demonstrate a similar trend.

5.2 GROUNDWATER ELEVATION MEASUREMENTS

Differences in elevations from the shallow and deep depth intervals indicate there is a significant downward vertical hydraulic gradient at the site. This downward gradient is probably responsible for the dissolved COCs detected in the Type III monitoring wells that are screened at the deeper depth intervals. In general, this downward vertical gradient has historically been observed base wide and has been attributed to base groundwater flow discharging into the New River and water production wells on the base.

The Type II contour map during 2004 indicates groundwater levels increased 1 to 2 feet from levels observed in 2003. However, the overall slope of the groundwater surface remains essentially the same from the previous year. The groundwater surface measured in the Type II wells slopes from high points at monitoring wells MW-15 and MW-16 toward a low point at MW-8. Based on this information, shallow groundwater at the site is inferred to flow to the south. A comparison of historical groundwater elevations indicates the groundwater flow direction in the shallow aquifer has remained essentially

unchanged and by inference, contaminant transport in the shallow zone has not changed significantly in the last eight years.

The groundwater elevation exhibited by the Type III wells during 2004, sloped from a high point at MW-7 to a low point at MW-19. Deeper groundwater at the site is inferred to flow from south to north. The vertical potentiometric gradient at this site is variable. In the northern portion of the site, the downward gradient was approximately 0.21 ft/ft in the vicinity of wells MW-16 and MW-17. In the central portion of the site the downward gradient was approximately 0.10 ft/ft in the vicinity of MW-9 and MW-11. Moving to the south, during 2002 the gradient appeared to have reversed to an upward gradient of approximately 0.03 ft/ft between MW-7 and MW-8. During 2003 and 2004 this condition has persisted with an upward gradient of 0.02 ft/ft and 0.03 ft/ft respectively.

5.3 GROUNDWATER ANALYTICAL CONCLUSIONS

Groundwater sampling and analysis continues to detect dissolved phase hydrocarbon components in groundwater at the site. In general, contaminant concentrations continue to demonstrate a decreasing trend. During the April 2004 groundwater sampling event, only four shallow monitoring wells (MW-08, MW-11, MW-13 and MW-16) and two deep monitoring wells (MW-09 and MW-17) demonstrated COCs above groundwater quality standards. During the November 2004 sampling event a total of 11 shallow monitoring wells demonstrated COCs above groundwater quality standards. The wells included the four that were sampled in April (MW-08, MW-11, MW-13 and MW-16) and seven additional monitoring wells (MW-03, MW-04, MW-06, MW-12, MW-15, MW-26 and PW-01) that were added based on recommendations in the RCAP. Deep monitoring wells MW-7 and MW-9 continued to demonstrated COCs above groundwater quality standards.

These trends will continue to be monitored as quarterly and semi-annual sampling and analysis events are completed. As mentioned in Section 5.1, continued operation of the AS/SVE system will reduce adsorbed-phase hydrocarbons in subsurface soil that should result in a reduction of dissolved-phase contaminants in groundwater at the site. For reference, historical groundwater analytical results for individual monitoring wells are provided in *Appendix E.* Graphs comparing groundwater elevation versus total BTEX concentration in select monitoring wells that have displayed the presence of BTEX compounds above the groundwater quality standard are provided in *Appendix F.* In general, the graphs demonstrate a decreasing trend in BTEX concentrations in monitoring

wells at the site. Also, there doesn't appear to be a clear correlation between groundwater elevation change and BTEX concentration fluctuations.

Groundwater analytical results from the past two sampling events indicate the concentration of dissolved contaminants has decreased slightly since October 2003, however, the geometry and size of the plume in the "shallow" aquifer has remained relatively unchanged. Based on analytical results from the April and October 2004 sampling events, the horizontal extent of the plume in the shallow aquifer has been delineated at the site. The Type III monitoring well MW-9D (screened from 95 to 100 feet bls) aids in the delineation of the vertical extent of contamination at the site. However, Type III monitoring wells MW-9 and MW-17 (screened 45 to 50 feet bls) continue to display concentrations of COCs that exceed North Carolina's Groundwater Quality Standards. This indicates the lateral extent of contamination in the 50-feet depth interval has not been delineated to the north and northwest. The two additional Type III monitoring wells recommended in the RCAP will provide additional information on groundwater quality to the north (downgradient) and east (upgradient) at the site.

6.0 RECOMMENDATIONS

Results of the optimization survey completed by CATLIN, concluded that the site meets the criteria for classification as an Intermediate Risk and Residential Land Use site. This ranking revises the target cleanup goals for both soil and groundwater. The new target cleanup level for soil will be based on the Residential Maximum Soil Contaminant Concentrations (MSCCs), and the target cleanup level for groundwater will be remain 2L GWQS.

6.1 AS/SVE SYSTEM

In accordance with recommendations presented in the revised corrective plan completed by CATLIN, a portion of the AS/SVE system was shutdown June 11, 2004 and quarterly groundwater sampling and analysis was initiated. The remaining active portion of the AS/SVE system will remain on during implementation of the ongoing groundwater monitoring program.

6.2 GROUNDWATER LEVEL MEASUREMENTS

Depth to groundwater/product measurements should continue at all monitoring wells being sampled at the site. Results of the measurements will be used to develop a groundwater elevation contour map of the site in both the "shallow" and "deep" aquifer zones.

6.3 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

The following recommendations developed in the RCAP prepared by CATLIN and discussed in Section 2.3 of this report should be implemented:

- Collection of soil samples from the capillary fringe at six locations for Risk Based Analysis
- Quarterly groundwater sample collection from shallow monitoring wells (MW-8, MW-10, MW-14, MW-18, MW-20, MW-22, MW-24 and MW-26. The groundwater samples are to be analyzed for VOCs using EPA Method 602 plus xylenes, SVOCs using EPA Method 625 for PAH compounds only, and Standard Prep Method 3030C for lead.
- Install two 50-feet deep Type III monitoring wells.
- Shutdown and properly abandon water supply well 623.

- Quarterly groundwater sample collection from deep monitoring wells (MW-7, MW-19, MW-21, MW-23, MW-25, plus the two additional deep monitoring wells). The groundwater samples are to be analyzed for VOCs using EPA Method 602 plus xylenes, SVOCs using EPA Method 625 for PAH compounds only, and Standard Prep Method 3030C for lead.
- Semi-annual groundwater sample collection from deep monitoring well MW-9D. The groundwater sample is to be analyzed for VOCs using EPA Method 602 plus xylenes, SVOCs using EPA Method 625 for PAH compounds only, and Standard Prep Method 3030C for lead.

The analytical results will be compared to the 2L groundwater quality standard (GWQS). *Tables 6.1* and *6.2* present a summary of the quarterly groundwater sampling program recommended in the RCAP.

In addition, a flow-through cell will continue to be used in the measurement of DO and ORP in the field. This eliminates exposure of the purged groundwater to air that will produce erroneous results that are biased high. Analytical results from the sampling events will be reviewed and recommendations for future remedial work at the site will be developed as appropriate.

TABLES

TABLE 2.1
MCB CAMP LEJEUNE
Site Rehabilitation Goals

MEDIUM	COMPONENTS	2001 CONDITIONS	2002 CONDITIONS	2003 CONDITIONS	2004 CONDITIONS	TARGET CLEANUP
Free Product	Gasoline/Diesel	No Free product observed in any well	No Free product observed in any well	No Free product observed in any well	No Free product observed in any well	≤1/8"
Vadose Zone Soil	TPH 3550/5030	TPH soil contamination was measured in November 1992 at levels that range from< 1 mg/kg to 2,700 mg/kg.	TPH soil contamination was measured in November 1992 at levels that range from< 1 mg/kg to 2,700 mg/kg.	TPH soil contamination was measured in November 1992 at levels that range from< 1 mg/kg to 2,700 mg/kg.	TPH soil contamination was measured in November 1992 at levels that range from< 1 mg/kg to 2,700 mg/kg.	≤40 mg/kg, DRO ≤10 mg/kg, GRO
Groundwater	Benzene Ethylbenzene Chlorobenzene Chrysene Naphthalene Toluene Xylenes (Total) MTBE	2,600 ug/l 1,400 ug/l 170 <0.1 ug/l 250 11,000 ug/l 9,000 ug/l 64,000 ug/l	1,770 ug/l 481 ug/l <1 <5 ug/l 271 2,900 ug/l 3,270 ug/l 4,200 ug/l	1,960 ug/l 155 ug/l <1 <5.1 ug/l 140 416 ug/l 1,610 ug/l 4,110 ug/l	2,360 ug/l 1,400 ug/l <1 <4.8 ug/l 268 722 ug/l 2,450 ug/l 3,930 ug/l	1 ug/l 29 ug/l 50 ug/l 5 ug/l 21 1,000 ug/l 530 ug/l 210 ug/l

TABLE 3.1
Cumulative Mass of Volatile Hydrocarbons Recovered
Air Sparging (AS) / Soil Vapor Extraction (SVE) System
MCB CAMP LEJEUNE - BM-820
SVE Stack

Date	Time	SVE Valve Hour Meter (Hrs)	TH Conc ($PPM_{measured}$) (PPMv)	Vapor Velocity (V) (ft/min)	Absolute Pressure (" Hg)	Absolute Temperature (degrees Rankine)	Calculated Vapor Flowrate (Q) (SCFM)	TH Conc (C) (mg/l)	TH Recovery Rate (M) (lb/day)	Cumulative Mass of Hydrocarbons Recovered (lbs)	Comments
06/03/03	9:00	40289	6	8400	227.92	591	4081	0.032	11.7	19120.2	
06/10/03	12:30	40464	3	9300	228.92	599	4458	0.016	6.4	19185.9	
06/19/03	13:40	40677	4	9300	229.92	598	4465	0.021	8.5	19251.9	
06/25/03	14:40	40820	2	10100	230.92	602	4817	0.011	4.6	19290.8	
07/01/03	9:40	40958	3	9200	231.92	585	4515	0.016	6.4	19322.6	
07/07/03	11:00	41104	3	9600	232.92	601	4586	0.016	6.5	19362.1	
07/14/03	9:00	41264	0	8600	233.92	574	4302	0.000	0.0	19383.9	
07/23/03	7:40	41475	0	8600	234.92	590	4185	0.000	0.0	19383.9	
07/28/03	3:30	41599	0	8800	235.92	587	4304	0.000	0.0	19383.9	
08/06/03	11:50	41810	0	10100	236.92	592	4898	0.000	0.0	19383.9	
08/13/03	11:00	41981	0	10400	237.92	600	4977	0.000	0.0	19383.9	
08/20/03	9:00	42145	0	10500	238.92	589	5118	0.000	0.0	19383.9	
08/26/03	10:30	42290	0	11600	239.92	595	5598	0.000	0.0	19383.9	
09/02/03	13:00	42458	0	11400	240.92	599	5464	0.000	0.0	19383.9	
09/09/03	14:00	42630	0	10800	241.92	587	5283	0.000	0.0	19383.9	Hurricane Isabel
09/24/03	8:00	42871	0	8600	242.92	581	4250	0.000	0.0	19383.9	
09/29/03	11:30	42994	0	9500	243.92	584	4671	0.000	0.0	19383.9	
10/07/03	8:00	43050	0	8200	244.92	562	4189	0.000	0.0	19383.9	
10/13/03	10:30	43174	0	9500	245.92	587	4647	0.000	0.0	19383.9	
10/21/03	8:00	43363	0	8400	246.92	571	4224	0.000	0.0	19383.9	
10/30/03	10:30	43582	0	9100	247.92	575	4544	0.000	0.0	19383.9	
11/04/03	8:00	43613	1	8800	248.92	587	4304	0.005	2.0	19385.2	
11/12/03	13:50	43788	2	9200	249.92	593	4454	0.011	4.2	19408.2	
11/18/03	8:00	43926	0	8600	250.92	570	4332	0.000	0.0	19420.4	
11/24/03	12:30	44007	3	8700	251.92	546	4575	0.016	6.5	19431.4	
12/03/03	14:48	44195	0	8900	252.92	557	4588	0.000	0.0	19457.0	
12/11/03	14:45	44289	3	9200	253.92	564	4683	0.016	6.7	19470.1	
12/18/03	14:00	44557	1	9100	254.92	572	4568	0.005	2.2	19519.5	
12/26/03	12:55	44742	0	8500	255.92	558	4374	0.000	0.0	19527.9	

TABLE 3.1
Cumulative Mass of Volatile Hydrocarbons Recovered
Air Sparging (AS) / Soil Vapor Extraction (SVE) System
MCB CAMP LEJEUNE - BM-820
SVE Stack

Date	Time	SVE Valve Hour Meter (Hrs)	TH Conc ($PPM_{measured}$) (PPMv)	Vapor Velocity (V) (ft/min)	Absolute Pressure (" Hg)	Absolute Temperature (degrees Rankine)	Calculated Vapor Flowrate (Q) (SCFM)	TH Conc (C) (mg/l)	TH Recovery Rate (M) (lb/day)	Cumulative Mass of Hydrocarbons Recovered (lbs)	Comments
12/31/03	13:30	44866	1	9400	256.92	577	4677	0.005	2.2	19533.7	
01/07/04	13:45	45033	1	8900	257.92	545	4689	0.005	2.2	19549.2	
01/14/04	9:30	45177	0	8200	258.92	538	4376	0.000	0.0	19555.9	
01/22/04	14:30	45372	4	8400	259.92	562	4291	0.021	8.2	19589.1	
01/28/04	15:30	45518	2	8800	260.92	549	4602	0.011	4.4	19627.2	
02/04/04	11:45	45587	0	9100	261.92	555	4708	0.000	0.0	19633.5	
02/13/04	12:40	45807	1	9500	262.92	551	4950	0.005	2.4	19644.3	
02/19/04	10:55	45946	2	9700	263.92	554	5027	0.011	4.8	19665.0	
02/25/04	14:45	46091	2	9800	264.92	544	5172	0.011	4.9	19694.3	
03/04/04	10:10	46282	3	9500	264.92	566	4819	0.016	6.9	19741.3	
03/12/04	10:55	46474	2	9200	264.92	556	4751	0.011	4.5	19786.9	
03/17/04	14:30	46599	0	9100	264.92	546	4785	0.000	0.0	19798.7	
03/25/04	14:10	46790	2	8900	264.92	563	4539	0.011	4.3	19815.9	
04/01/04	14:00	46940	1	8800	265.92	553	4569	0.005	2.2	19836.2	
04/09/04	15:35	47124	3	8600	265.92	571	4324	0.016	6.2	19868.2	
04/15/04	12:00	47262	0	7800	265.92	564	3971	0.000	0.0	19885.9	
04/21/04	14:35	47366	2	8500	265.92	571	4274	0.011	4.1	19894.8	
04/28/04	10:05	47472	1	9100	265.92	567	4608	0.005	2.2	19908.6	
05/07/04	13:45	47693	1	8300	266.92	592	4025	0.005	1.9	19927.5	
05/11/04	12:55	47784	3	8900	266.92	583	4383	0.016	6.3	19943.0	
05/18/04	10:00	47952	2	8600	266.92	585	4221	0.011	4.0	19979.0	
05/26/04	9:45	48143	1	8400	266.92	583	4137	0.005	2.0	20002.8	
06/04/04	11:15	48361	1	8200	267.92	582	4045	0.005	1.9	20020.5	No data 6/11
06/18/04	11:15	48601	0	8600	267.92	598	4129	0.000	0.0	20030.1	
06/23/04	8:00	48720	2	8400	267.92	585	4123	0.011	3.9	20039.8	
07/07/04	12:30	49056	0	8700	268.92	608	4108	0.000	0.0	20067.3	No data 7/2

TABLE 3.1
Cumulative Mass of Volatile Hydrocarbons Recovered
Air Sparging (AS) / Soil Vapor Extraction (SVE) System
MCB CAMP LEJEUNE - BM-820
SVE Stack

Date	Time	SVE Valve Hour Meter (Hrs)	TH Conc ($PPM_{measured}$) (PPMv)	Vapor Velocity (V) (ft/min)	Absolute Pressure (" Hg)	Absolute Temperature (degrees Rankine)	Calculated Vapor Flowrate (Q) (SCFM)	TH Conc (C) (mg/l)	TH Recovery Rate (M) (lb/day)	Cumulative Mass of Hydrocarbons Recovered (lbs)	Comments
07/15/04	7:45	49147	0	8400	268.92	589	4095	0.000	0.0	20067.3	
07/21/04	9:45	49270	0	8800	268.92	591	4275	0.000	0.0	20067.3	
07/28/04	14:50	49443	0	9100	268.92	584	4474	0.000	0.0	20067.3	
08/06/04	10:15	49654	1	8700	269.92	573	4359	0.005	2.1	20076.4	
08/11/04	8:00	49772	0	8600	269.92	579	4265	0.000	0.0	20081.5	
08/18/04	11:30	49893	1	8900	269.92	589	4338	0.005	2.1	20086.7	
08/25/04	9:00	50058	0	5000	269.92	577	2488	0.000	0.0	20093.8	
09/02/04	12:00	50209	0	8800	270.92	581	4349	0.000	0.0	20093.8	
09/10/04	10:30	50403	0	8900	270.92	583	4383	0.000	0.0	20093.8	
09/16/04	9:30	50544	0	8800	270.92	573	4409	0.000	0.0	20093.8	
09/22/04	9:30	50688	1	8200	270.92	577	4080	0.005	1.9	20099.7	
09/29/04	12:00	50859	0	8400	270.92	589	4095	0.000	0.0	20106.6	
10/07/04	8:15	51046	1	8800	271.92	551	4586	0.005	2.2	20115.1	
10/13/04	10:35	51193	0	9100	271.92	575	4544	0.000	0.0	20121.8	
10/20/04	9:20	51360	0	8400	271.92	581	4151	0.000	0.0	20121.8	
10/27/04	9:05	51527	0	8700	271.92	567	4405	0.000	0.0	20121.8	
11/05/04	9:00	51738	1	8900	272.92	561	4555	0.005	2.2	20131.3	
11/10/04	9:05	51859	0	9100	272.92	565	4624	0.000	0.0	20136.8	
11/18/04	14:45	52054	2	8600	272.92	568	4347	0.011	4.1	20153.6	
12/16/04	9:25	52723	0	9500	273.92	551	4950	0.000	0.0	20211.2	
12/23/04	9:20	52892	2	8900	273.92	563	4539	0.011	4.3	20226.5	
12/31/04	9:20	52982	1	9200	273.92	557	4742	0.005	2.3	20238.8	Extrapolated Data

Notes:

$C = (PPM_{measured}) \times K \times (M_g/K_g) / 1000$

C: vapor concentration (mg/l)

$PPM_{measured}$: FID reading (PPM)

K: number of carbon atoms in calibration gas (1 in methane)

TH: total hydrocarbons calculated as gasoline (GRO)

$Q = (1-B) \times V \times A \times (P/P_{std}) \times (T_{std}/T)$

Q: vapor flowrate (SCFM)

B: percent water vapor in flowstream

V: vapor velocity (ft/min)

A: cross-sectional area (sq. ft)

P: absolute pressure of flowstream (" Hg)

P_{std}: standard pressure (29.92" Hg)

T: absolute temperature of flowstream (degrees Rankine)

T_{std}: standard temperature (528 degrees Rankine) at 68 degrees F (from Perry's handbook)

$M = Q \times C \times 0.0895$

M: hydrocarbon recovery rate (lb/day)

Assumptions:

Mg = 128 mg/mg-mole

Kg = 24.07 dsm^3/10^6 gm -mole

B = 0.003 from Perry's Chemical Handbook

A = 0.545 sq. ft

percent water vapor by volume	0.003
SVE Stack pipe diameter	10

* Estimated value due to malfunctionng instrument

TABLE 3.2

Cumulative Mass of Hydrocarbons Recovered

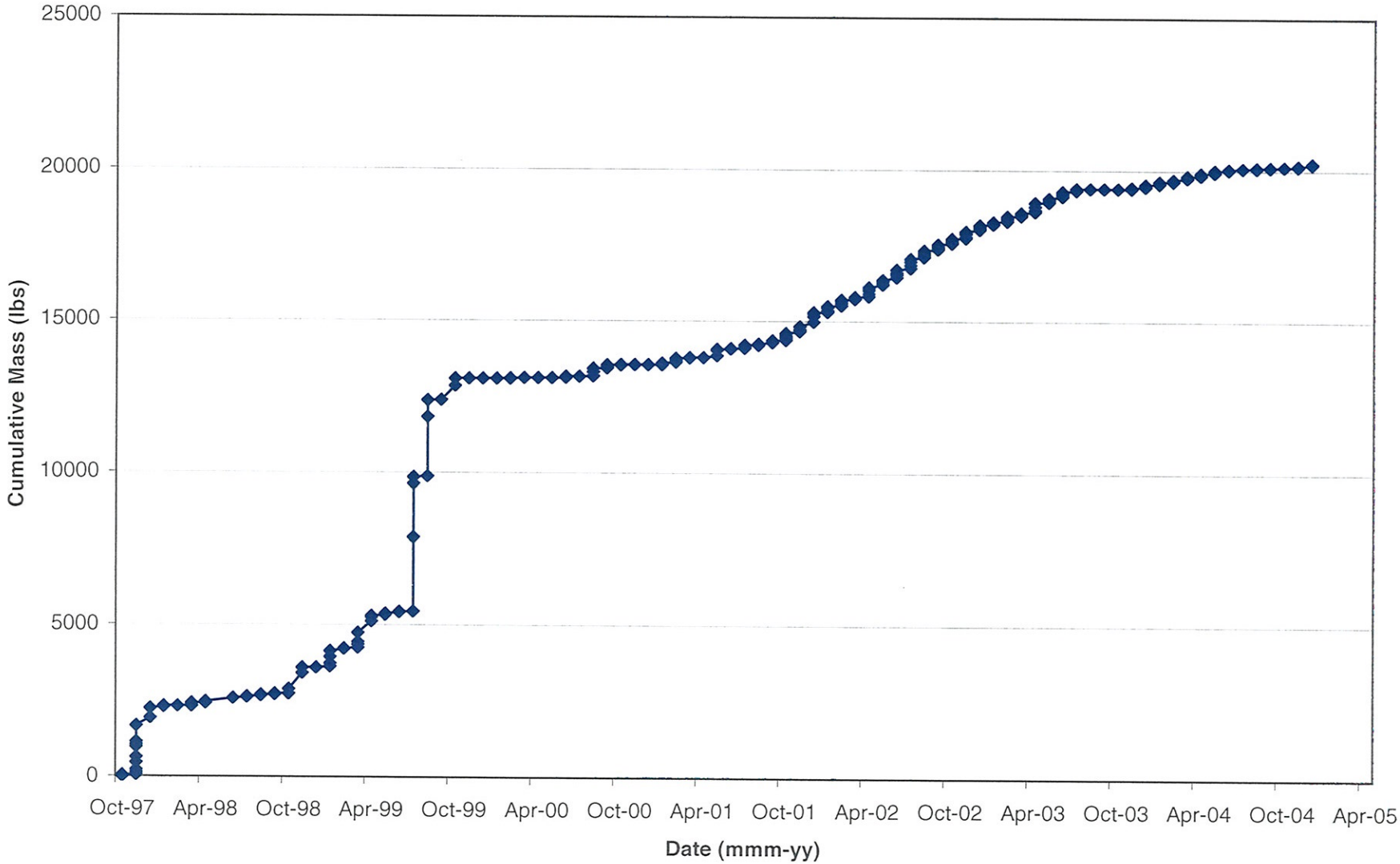


Table 4.1
Groundwater Elevation Table
Building 820
Camp LeJeune, North Carolina

Well No.	Well Type (depth)	Top of Casing	Date Measured	Depth (BTC)	Elev. (NGVD)	Date Measured	Depth (BTC)	Elev. (NGVD)	Date Measured	Depth (BTC)	Elev. (NGVD)	Date Measured	Depth (BTC)	Elev. (NGVD)	Date Measured	Depth (BTC)	Elev. (NGVD)	Date Measured	Depth (BTC)	Elev. (NGVD)	Date Measured	Depth (BTC)	Elev. (NGVD)
MW-4	shallow	33.35	Sep-01	16.74	16.61	Apr-02	18.88	14.47	Oct-02	18.08	15.27	Apr-03	13.64	19.71	Oct-03	14.53	18.82	Apr-04	11.54	21.81	Nov-04	13.19	20.16
MW-5	shallow	30.32	Sep-01	DRY	DRY	Apr-02	Dry	NM	Oct-02	Dry	NM	Apr-03	10.76	19.56	Oct-03	11.08	19.24	Apr-04	7.87	22.45	Nov-04	10.60	19.72
MW-6	shallow	32.04	Sep-01	NM	NM	Apr-02	NM	NM	Oct-02	NM	NM	Apr-03	NM	NM	Oct-03	NM	NM	Apr-04	NM	NM	Nov-04	12.61	19.43
MW-8	shallow	27.17	Sep-01	15.93	11.24	Apr-02	18.08	9.09	Oct-02	17.42	9.75	Apr-03	---	---	Oct-03	14.37	12.80	Apr-04	11.15	16.02	Nov-04	12.98	14.19
MW-10	shallow	32.62	Sep-01	16.12	16.50	Apr-02	16.23	16.39	Oct-02	15.42	17.20	Apr-03	12.13	20.49	Oct-03	NM	NM	Apr-04	10.55	22.07	Nov-04	surging	---
MW-11	shallow	29.29	Sep-01	13.74	15.55	Apr-02	14.81	14.48	Oct-02	14.26	15.03	Apr-03	9.04	20.25	Oct-03	10.3	18.99	Apr-04	7.65	21.64	Nov-04	9.91	19.38
MW-12	shallow	31.73	Sep-01	15.82	15.91	Apr-02	18.08	13.65	Oct-02	17.39	14.34	Apr-03	14.02	17.71	Oct-03	14.05	17.68	Apr-04	11.05	20.68	Nov-04	12.39	19.34
MW-13	shallow	29.15	Sep-01	13.85	15.30	Apr-02	16.86	12.29	Oct-02	16.21	12.94	Apr-03	12.79	16.36	Oct-03	12.48	16.67	Apr-04	9.66	19.49	Nov-04	10.54	18.61
MW-14	shallow	31.48	Sep-01	16.75	14.73	Apr-02	16.1	15.38	Oct-02	15.38	16.10	Apr-03	14.99	16.49	Oct-03	14.98	16.50	Apr-04	12.51	18.97	Nov-04	14.26	17.22
MW-15	shallow	30.18	Sep-01	13.25	16.93	Apr-02	15.04	15.14	Oct-02	14.41	15.77	Apr-03	10.36	19.82	Oct-03	10.71	19.47	Apr-04	7.54	22.64	Nov-04	9.21	20.97
MW-16	shallow	32.24	Sep-01	15.4	16.84	Apr-02	17.19	15.05	Oct-02	16.36	15.88	Apr-03	12.17	20.07	Oct-03	12.75	19.49	Apr-04	9.32	22.92	Nov-04	11.06	21.18
MW-18	shallow	31.70	Sep-01	15.63	16.07	Apr-02	NM	NM	Oct-02	NM	NM	Apr-03	NM	NM	Oct-03	NM	NM	Apr-04	9.41	22.29	Nov-04	11.16	20.54
MW-20	shallow	31.63	Sep-01	16.66	14.97	Apr-02	NM	NM	Oct-02	NM	NM	Apr-03	NM	NM	Oct-03	NM	NM	Apr-04	12.18	19.45	Nov-04	14.05	17.58
MW-26	shallow	28.72	Sep-01	12.79	15.93	Apr-02	15.99	12.73	Oct-02	15.12	13.60	Apr-03	12.15	16.57	Oct-03	13.72	15.00	Apr-04	10.34	18.38	Nov-04	12.06	16.66
MW-27	shallow	30.07	Sep-01	13.44	16.63	Apr-02	Dry	NM	Oct-02	Dry	NM	Apr-03	11.15	18.92	Oct-03	11.05	19.02	Apr-04	8.21	21.86	Nov-04	10.55	19.52
MW-7	deep	27.18	Sep-01	14.6	12.58	Apr-02	17.23	9.95	Oct-02	16.49	10.69	Apr-03	---	---	Oct-03	13.6	13.58	Apr-04	10.04	17.14	Nov-04	11.85	15.33
MW-9	deep	31.95	Sep-01	19.33	12.62	Apr-02	22.78	9.17	Oct-02	22.68	9.27	Apr-03	19.49	12.46	Oct-03	19.49	12.46	Apr-04	16.79	15.16	Nov-04	16.76	15.19
MW-9D	deep	32.54	Sep-01	21.91	10.63	Apr-02	23.93	8.61	Oct-02	23.75	NM	Apr-03	20.65	11.89	Oct-03	19.98	12.56	Apr-04	17.54	15.00	Nov-04	17.57	14.97
MW-17	deep	32.58	Sep-01	21.23	11.35	Apr-02	24.6	7.98	Oct-02	23.65	8.93	Apr-03	---	---	Oct-03	20.46	12.12	Apr-04	17.72	14.86	Nov-04	19.61	12.97
MW-19	deep	31.73	Sep-01	19.26	12.47	Apr-02	22.89	8.84	Oct-02	---	---	Apr-03	20.12	11.61	Oct-03	19.91	11.82	Apr-04	---	---	Nov-04	19.04	12.69
MW-21	deep	31.80	Sep-01	20.5	11.30	Apr-02	22.84	8.96	Oct-02	22.22	9.58	Apr-03	19.91	11.89	Oct-03	19.5	12.30	Apr-04	16.60	15.20	Nov-04	18.40	13.40

* BTC = Below Top of Casing

** NGVD = National Geodetic Vertical Datum

Measurement not used due to suspected equipment or operator error

CLJ - POL Berkeley Manor
Project #110385

Table 4.2
Analytical Data Summary
B-820 Year 7 Semi-Annual 1
April 2004 Shallow

Client Sample ID:		UST820-MW02	UST820-MW04	UST820-MW05	UST820-MW08	UST820-MW10	UST820-MW11	UST820-MW12	UST820-MW13	UST820-MW14	UST820-MW15	UST820-MW16	UST820-MW26	UST820-MW27
Well ID:		MW-2	MW-4	MW-5	MW-8	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-26	MW-27
Laboratory Sample ID:		F23436-1	F23478-3	F23423-2	F23597-3		F23496-2	F23436-5	F23436-4	F23478-4	F23423-1	F23478-2	F23597-1	F23423-3
Date Sampled:		04/14/04	04/15/04	04/13/04	04/20/04	no sample	04/16/04	04/14/04	04/14/04	04/15/04	04/13/04	04/15/04	04/20/04	4/13/2004
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 602														
Benzene	1	<1.0	<1.0	<1.0	1.4	N/A	<20	<1.0	12.5	<1.0	<1.0	2.4	<1.0	<1.0
Chlorobenzene	50	<1.0	<1.0	<1.0	<1.0	N/A	<20	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	200	**1.7**	<1.0	<1.0	**50.2**	N/A	<20	<1.0	<10	<1.0	<1.0	<1.0	<1.0	**1.2**
Ethylbenzene	29	**0.83 J**	<1.0	**0.62 J**	<1.0	N/A	31.6	<1.0	145	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (total)	530	**9.1**	<3.0	**3.4**	<3.0	N/A	2180	<3.0	1290	<3.0	<3.0	<3.0	<3.0	**3.3**
Toluene	1000	**1.20**	<1.0	**1.5**	<1.0	N/A	**264**	<1.0	**474**	<1.0	<1.0	<1.0	<1.0	**0.65 J**
Total BTEX		**11.13**		**5.52**	**1.4**		**2475.6**		**1921.5**			**2.4**		**3.95**
EPA 610														
Chrysene	5	<5.4	<5.2	<5.4	<5.3	N/A	<5.6	<5.2	<5.2	<5.2	<5.2	<5.3	<5.6	<5.5
Naphthalene	21	**3.4 J**	<5.2	<5.4	<5.3	N/A	92.3	<5.2	48.4	<5.2	<5.2	<5.3	<5.6	<5.5
Acenaphthene	80	<5.4	<5.2	<5.4	<5.3	N/A	<5.6	<5.2	<5.2	<5.2	<5.2	<5.3	<5.6	<5.5
Acenaphthylene	210	<5.4	<5.2	<5.4	<5.3	N/A	<5.6	<5.2	<5.2	<5.2	<5.2	<5.3	<5.6	<5.5
Benzo(a)anthracene	0.05	<5.4	<5.2	<5.4	<5.3	N/A	<5.6	<5.2	<5.2	<5.2	<5.2	<5.3	<5.6	<5.5
Pyrene	210	<5.4	<5.2	<5.4	<5.3	N/A	<5.6	<5.2	<5.2	<5.2	<5.2	<5.3	<5.6	<5.5
Fluorene	280	<5.4	<5.2	<5.4	<5.3	N/A	<5.6	<5.2	<5.2	<5.2	<5.2	<5.3	<5.6	**10**
Anthracene	2100	<5.4	<5.2	<5.4	<5.3	N/A	<5.6	<5.2	<5.2	<5.2	<5.2	<5.3	<5.6	<5.5
Fluoranthene	280	<5.4	<5.2	<5.4	<5.3	N/A	<5.6	<5.2	<5.2	<5.2	<5.2	<5.3	<5.6	<5.5
Phenanthrene	210	<5.4	<5.2	<5.4	<5.3	N/A	<5.6	<5.2	<5.2	<5.2	<5.2	<5.3	<5.6	<5.5

Bold type indicates detectable concentrations.
Shaded area indicates detectable concentrations above the groundwater quality standard.

MW-10 bubbling; not sampled
J= estimated
NA= not analyzed

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Samples analyzed by Accutest

CLJ - POL Berkeley Manor
Project #110385

Table 4.3
Analytical Data Summary
B-820 Year 7 Semi-Annual 1
April 2004 Deep

Client Sample ID:		UST820-MW07	UST820-MW09	UST820-MW09D	UST820-MW17	UST820-MW19	UST820-MW21
Well ID:		MW-7	MW-9	MW-9D	MW-17	MW-19	MW-21
Laboratory Sample ID:		F23597-4	F23436-2	F23436-3	F23478-1	F23496-1	F23496-4
Date Sampled:		04/20/04	04/14/04	4/14/2004	04/15/04	04/16/04	04/16/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 602							
Benzene	1	<1.0	**1170**	<1.0	**181**	**0.79 J**	<1.0
Chlorobenzene	50	<1.0	<20	<1.0	<10	<1.0	<1.0
Methyl tert-butyl ether	200	<1.0	**2620**	<1.0	**1500**	**4.5**	**0.51 J**
Ethylbenzene	29	<1.0	**225**	<1.0	<10	<1.0	<1.0
Xylenes (total)	530	<3.0	**532**	<3.0	<30	**1.8 J**	<3.0
Toluene	1000	<1.0	**375**	<1.0	<10	**1.3**	<1.0
Total BTEX			**2302**		**181**	**3.89**	
EPA 610							
Chrysene	5	<5.3	<5.4	<5.4	<5.1	<5.3	<5.2
Naphthalene	21	<5.3	**14.8**	<5.4	<5.1	<5.3	<5.2
Acenaphthene	80	<5.3	<5.4	<5.4	<5.1	<5.3	<5.2
Acenaphthylene	210	<5.3	<5.4	<5.4	<5.1	<5.3	<5.2
Benzo(a)anthracene	0.05	<5.3	<5.4	<5.4	<5.1	<5.3	<5.2
Pyrene	210	<5.3	<5.4	<5.4	<5.1	<5.3	<5.2
Fluorene	280	<5.3	<5.4	<5.4	<5.1	<5.3	<5.2
Anthracene	2100	<5.3	<5.4	<5.4	<5.1	<5.3	<5.2
Fluoranthene	280	<5.3	<5.4	<5.4	<5.1	<5.3	<5.2
Phenanthrene	210	<5.3	<5.4	<5.4	<5.1	<5.3	<5.2
Bold type indicates detectable concentrations.							
Shaded area indicates detectable concentrations above the groundwater quality standard.							

J= estimated
NA= not analyzed

Printed: 3/24/2005
Samples analyzed by Accutest

CLJ - POL Berkeley Manor
Project #110385

Table 4.4
Analytical Data Summary
B-820 Year 7 Semi-Annual 2
November 2004 Shallow

Client Sample ID:		UST820-MW02	UST820-MW03	UST820-MW04	UST820-MW05	UST820-MW06	UST820-MW08	UST820-MW10	UST820-MW11	UST820-MW12	UST820-MW13
Well ID:		MW-2	MW-3	MW-04	MW-5	MW-6	MW-8	MW-10	MW-11	MW-12	MW-13
Lab ID:		F27946-2	F27946-4	F28053-2	F28379-11	F28053-3	F28379-10	NS	F28379-13	F28053-4	F28053-5
Date Sampled:		11/03/04	11/03/04	11/06/04	11/20/04	11/06/04	11/20/04	NS	11/22/04	11/06/04	11/06/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 602											
Benzene	1	**0.7 J**	42.4	1.6	<1.0	212.0	1.3	NS	7.4	1.9	2.8
Chlorobenzene	50	<1.0	<1.0	<1.0	<1.0	<20	<1.0	NS	<1.0	<1.0	<1.0
Methyl tert-butyl ether	200	<1.0	**4.8**	<1.0	<1.0	**12.1 J**	**15.1**	NS	<1.0	**0.71 J**	**1.5**
Ethylbenzene	29	**14.8**	**7.4**	**0.63 J**	<1.0	1400.0	<1.0	NS	111.0	**17.0**	**19.5**
Xylenes (total)	530	**116.0**	**52.5**	**1.3 J**	<3.0	906.0	<3.0	NS	2450.0	**9.5**	**64**
Toluene	1000	**66.9**	**19.4**	**0.74 J**	<1.0	**217.0**	<1.0	NS	**722**	**1.8**	**19.1**
Total BTEX		**198.4**	**198.4**	**4.27**	**0**	**2735**	**1.3**	**0**	**3290.4**	**30.2**	**105.0**
EPA 610											
Chrysene	5	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	NS	<4.8	<4.8	<4.8
Naphthalene	21	**11.1**	<4.8	<4.8	<4.8	268.0	<4.8	NS	**139.0**	**2.9**	**3.2**
Acenaphthene	80	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	NS	<4.8	<4.8	<4.8
Acenaphthylene	210	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	NS	<4.8	<4.8	<4.8
Benzo(a)anthracene	0.05	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	NS	<4.8	<4.8	<4.8
Pyrene	210	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	NS	<4.8	<4.8	<4.8
Fluorene	280	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	NS	<4.8	<4.8	<4.8
Anthracene	2100	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	NS	<4.8	<4.8	<4.8
Fluoranthene	280	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	NS	<4.8	<4.8	<4.8
Phenanthrene	210	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	NS	<4.8	<4.8	<4,8
SW846-3010A											
Lead		<5.0	<5.0	<5.0	<5.0	<5.0	27.0	NS	<5.0	<5.0	<5.0
Bold type indicates detectable concentrations.											
Shaded area indicates detectable concentrations above the groundwater quality standards.											

J= estimated
NA= not analyzed

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Samples analyzed by Accutest

CLJ - POL Berkeley Manor
Project #110385

Table 4.4
Analytical Data Summary
B-820 Year 7 Semi-Annual 2
November 2004 Shallow

Client Sample ID:		UST820-MW14	UST820-MW15	UST820-MW16	UST820-MW18	UST820-MW20	UST820-MW22	UST820-MW24	UST820-MW26	UST820-MW27	UST820-PW01
Well ID:		MW-14	MW-15	MW-16	MW-18	MW-20	MW-22	MW-24	MW-26	MW-27	PW-1
Lab ID:		F28379-7	F28053-1	F28379-6	F28379-2	F28379-4	F28588-1	F28588-3	F28379-4	F28379-14	F28379-12
Date Sampled:		11/20/04	11/06/04	11/20/04	11/20/04	11/20/04	11/30/04	11/30/04	11/20/04	11/22/04	11/22/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 602											
Benzene	1	**0.93 J**	**2.5**	**2.6**	<1.0	<1.0	<1.0	<1.0	**1.0**	<1.0	**109.0**
Chlorobenzene	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	200	**2.6**	<1.0	**0.60 J**	<1.0	<1.0	<1.0	<1.0	**4.3**	<1.0	**11.6**
Ethylbenzene	29	<1.0	**0.65 J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**78.2**
Xylenes (total)	530	<3.0	**1.4 J**	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	**1.4 J**	**333**
Toluene	1000	<1.0	**0.89 J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**48.3**
Total BTEX		**0.93**	**5.44**	**2.6**	**0**	**0**	**0**	**0**	**1.0**	**1.4**	**568.5**
EPA 610											
Chrysene	5	<4.8	<4.8	<4.8	<4.9	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Naphthalene	21	<4.8	<4.8	<4.8	<4.9	<4.8	<4.8	<4.8	<4.8	<4.8	**10.8**
Acenaphthene	80	<4.8	<4.8	<4.8	<4.9	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Acenaphthylene	210	<4.8	<4.8	<4.8	<4.9	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Benzo(a)anthracene	0.05	<4.8	<4.8	<4.8	<4.9	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Pyrene	210	<4.8	<4.8	<4.8	<4.9	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Fluorene	280	<4.8	<4.8	<4.8	<4.9	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Anthracene	2100	<4.8	<4.8	<4.8	<4.9	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Fluoranthene	280	<4.8	<4.8	<4.8	<4.9	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Phenanthrene	210	<4.8	<4.8	<4.8	<4.9	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
SW846-3010A											
Lead		<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	**5.2**	**11.0**	6.0	<5.0
Bold type indicates detectable concentrat		**Bold type indicates detectable concentrations.**									
Shaded area indicates detectable concent		Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
NA= not analyzed

Printed: 3/24/2005
Samples analyzed by Accutest

CLJ - POL Berkeley Manor
Project #110385

Table 4.5
Analytical Data Summary
B-820 Year 7 Semi-Annual 2
November 2004 Deep

Client Sample ID:		UST820-MW07	UST820-MW09	UST820-MW09D	UST820-MW17	UST820-MW19	UST820-MW21	UST820-MW23	UST820-MW25
Well ID:		MW-7	MW-9	MW-9D	MW-17	MW-19	MW-21	MW-23	MW-25
Lab ID:		F28379-9	F27946-3	F27946-1	F28379-5	F28379-1	F28379-3	F28588-2	F28588-4
Date Sampled:		11/20/04	11/3/04	11/3/04	11/20/04	11/20/04	11/20/04	11/30/04	11/30/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 602									
Benzene	1	**0.56 J**	2360.0	<1.0	242.0	**0.57 J**	<1.0	<1.0	<1.0
Chlorobenzene	50	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	200	<1.0	3930.0	<1.0	1760.0	4.7	**0.084**	<1.0	**1.5**
Ethylbenzene	29	<1.0	222.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0
Xylenes (total)	530	<3.0	**495**	<3.0	**2.3 J**	<1.0	<3.0	<3.0	<3.0
Toluene	1000	<1.0	**428**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total BTEX		**0.56**	**3505**	**0**	**244.30**	**0.57**	**0**	**0**	**0**
EPA 610									
Chrysene	5	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Naphthalene	21	<4.8	**16.8**	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Acenaphthene	80	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Acenaphthylene	210	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Benzo(a)anthracene	0.05	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Pyrene	210	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Fluorene	280	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Anthracene	2100	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Fluoranthene	280	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
Phenanthrene	210	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8	<4.8
SW846-3010A									
Lead		**7.7**	<5.0	<5.0	<15.0	<5.0	<5.0	**5.4**	<5.0
Bold type indicates detectable concentrations.									
Shaded area indicates detectable concentrations above the groundwater quality standard.									

J= estimated
NA= not analyzed

Printed: 3/24/2005
Samples analyzed by Accutest

Table 6.1
Building 820 (First and Fourth Quarters)
Groundwater Sample Collection and Analysis Table

Analysis	Type II Shallow Monitoring Wells										
	MW-2	MW-3	MW-4	MW-5	MW-6	MW-11	MW-12	MW-13	MW-15	MW-16	MW-27
Field Screening											
Temperature	X	X	X	X	X	X	X	X	X	X	X
Conductivity	X	X	X	X	X	X	X	X	X	X	X
Turbidity	X	X	X	X	X	X	X	X	X	X	X
pH	X	X	X	X	X	X	X	X	X	X	X
Dissolved Oxygen	X	X	X	X	X	X	X	X	X	X	X
ORP	X	X	X	X	X	X	X	X	X	X	X
VOAs Method 602	X	X	X	X	X	X	X	X	X	X	X
PAHs Method 625	X	X	X	X	X	X	X	X	X	X	X
Lead Method 6010B	X	X	X	X	X	X	X	X	X	X	X

Analysis	Type II Shallow Monitoring Wells							
	MW-8	MW-10	MW-14	MW-18	MW-20	MW-22	MW-24	MW-26
Field Screening								
Temperature	X	X	X	X	X	X	X	X
Conductivity	X	X	X	X	X	X	X	X
Turbidity	X	X	X	X	X	X	X	X
pH	X	X	X	X	X	X	X	X
Dissolved Oxygen	X	X	X	X	X	X	X	X
ORP	X	X	X	X	X	X	X	X
VOAs Method 602	X	X	X	X	X	X	X	X
PAHs Method 625	X	X	X	X	X	X	X	X
Lead Method 6010B	X	X	X	X	X	X	X	X

Table 6.1
Building 820 (First and Fourth Quarters)
Groundwater Sample Collection and Analysis Table

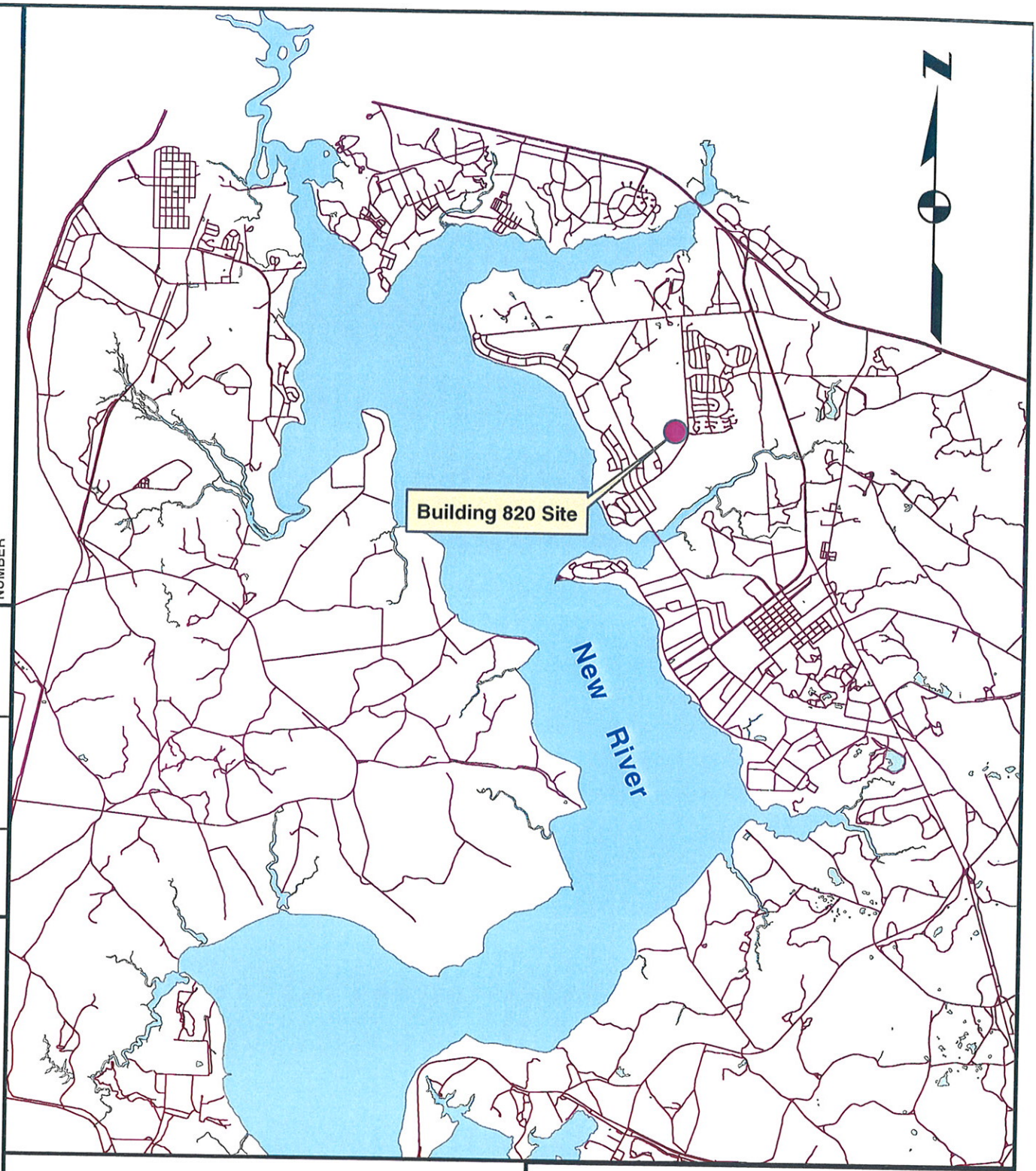
Analysis	Type III Deep Monitoring Wells									
	MW-7	MW-9	MW-9D	MW-17	MW-19	MW-21	MW-23	MW-25	TBD	TBD
Field Screening										
Temperature	X	X	X	X	X	X	X	X	X	X
Conductivity	X	X	X	X	X	X	X	X	X	X
Turbidity	X	X	X	X	X	X	X	X	X	X
pH	X	X	X	X	X	X	X	X	X	X
Dissolved Oxygen	X	X	X	X	X	X	X	X	X	X
ORP	X	X	X	X	X	X	X	X	X	X
VOAs Method 602	X	X	X	X	X	X	X	X	X	X
PAHs Method 625	X	X	X	X	X	X	X	X	X	X
Lead Method 6010B	X	X	X	X	X	X	X	X	X	X

Table 6.2
Building 820 (Second and Third Quarters)
Groundwater Sample Collection and Analysis Table

Analysis	Type II Shallow Monitoring Wells							
	MW-8	MW-10	MW-14	MW-18	MW-20	MW-22	MW-24	MW-26
Field Screening								
Temperature	X	X	X	X	X	X	X	X
Conductivity	X	X	X	X	X	X	X	X
Turbidity	X	X	X	X	X	X	X	X
pH	X	X	X	X	X	X	X	X
Dissolved Oxygen	X	X	X	X	X	X	X	X
ORP	X	X	X	X	X	X	X	X
VOAs Method 602	X	X	X	X	X	X	X	X
PAHs Method 625	X	X	X	X	X	X	X	X
Lead Method 6010B	X	X	X	X	X	X	X	X

Analysis	Type III Shallow Monitoring Wells				
	MW-7	MW-19	MW-21	MW-23	MW-25
Field Screening					
Temperature	X	X	X	X	X
Conductivity	X	X	X	X	X
Turbidity	X	X	X	X	X
pH	X	X	X	X	X
Dissolved Oxygen	X	X	X	X	X
ORP	X	X	X	X	X
VOAs Method 602	X	X	X	X	X
PAHs Method 625	X	X	X	X	X
Lead Method 6010B	X	X	X	X	X

FIGURES



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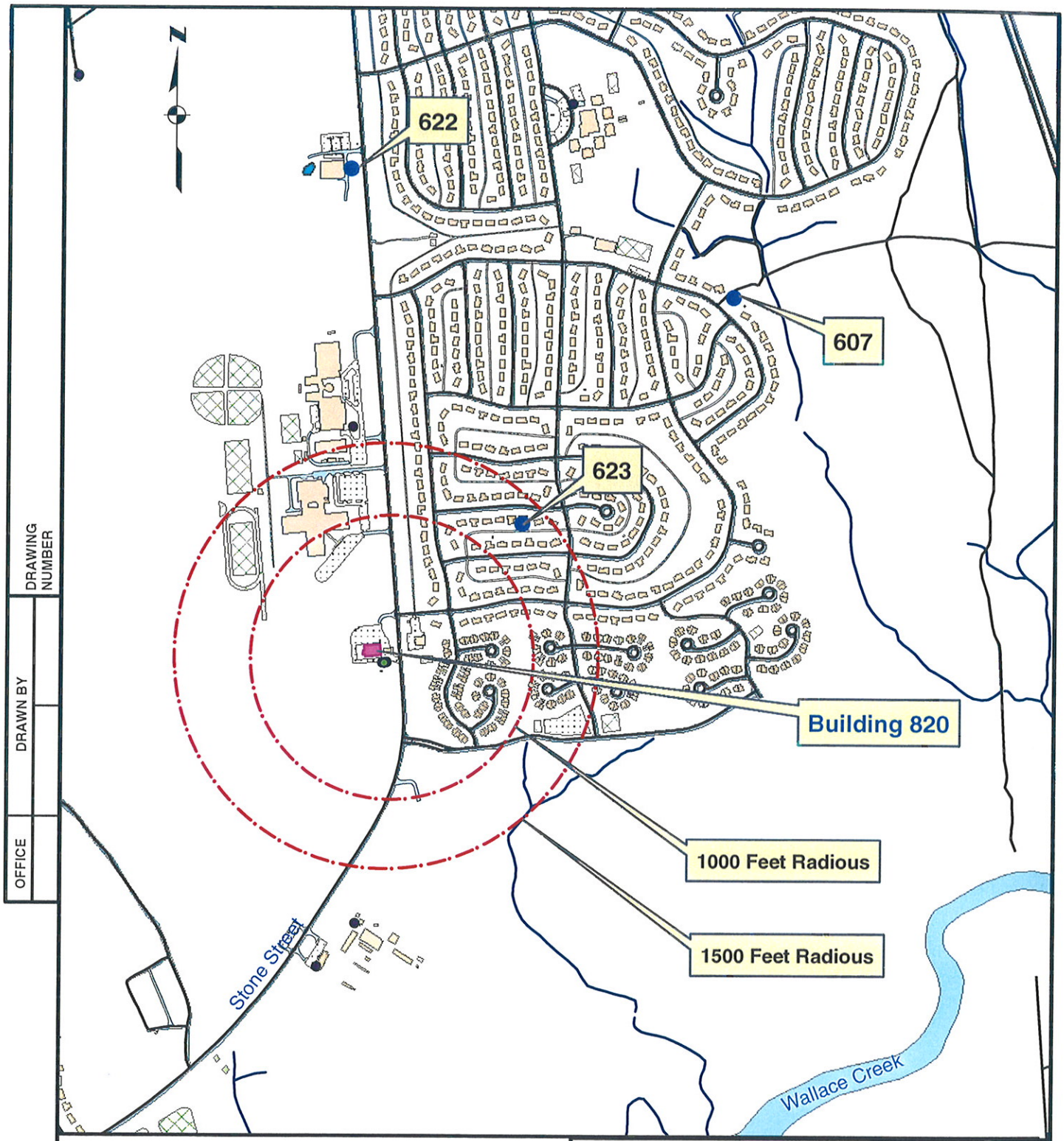
OFFICE

0 5,000 10,000 20,000 Feet

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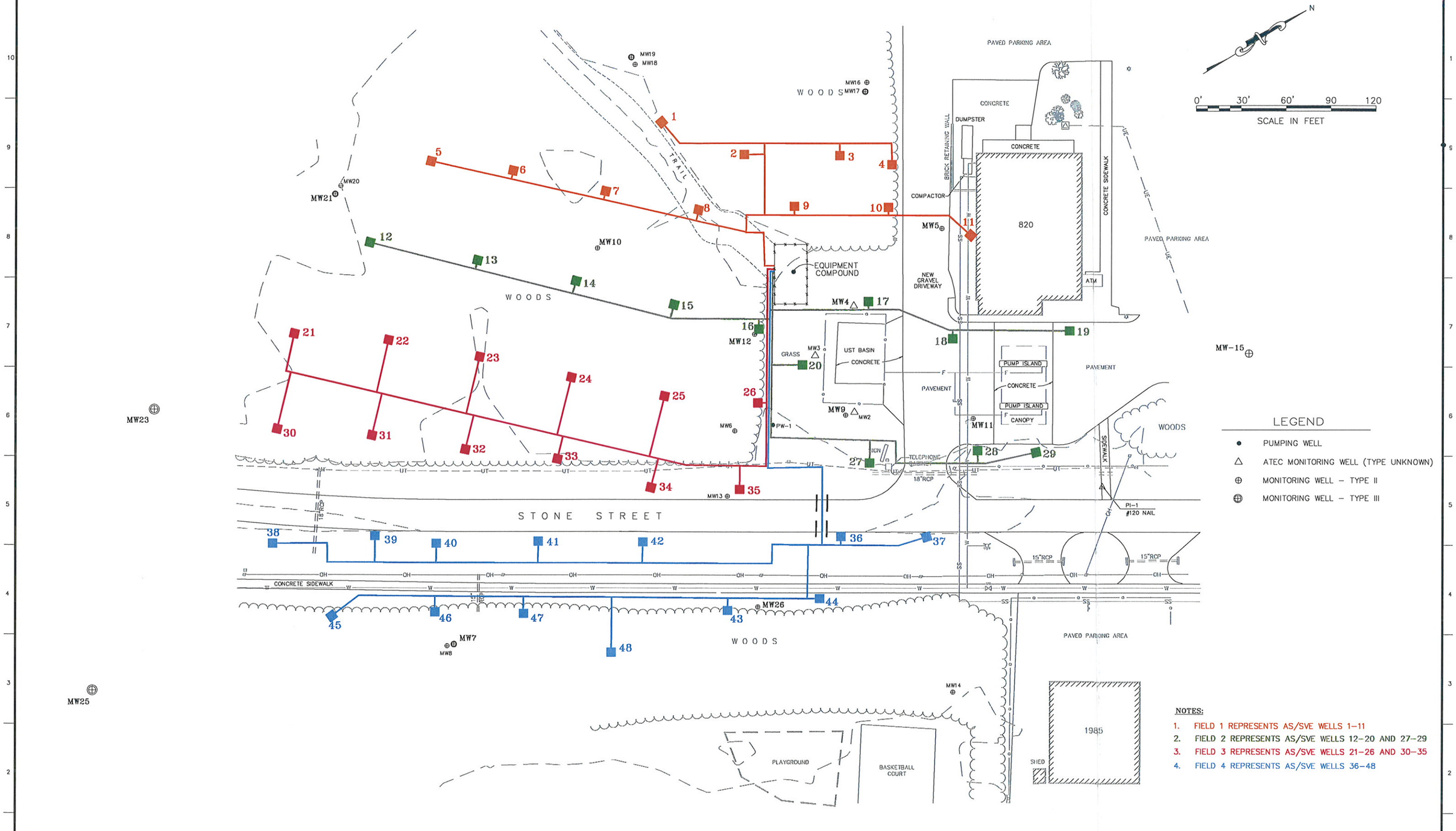
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FIGURE 1-1
SITE VICINITY MAP
BUILDING 820
MARINE CORPS BASE
CAMP LEJEUNE



Shaw™ Shaw Environmental, Inc.

FIGURE 1-2
SITE LOCATION MAP
BUILDING 820
MARINE CORPS BASE
CAMP LEJEUNE



A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P

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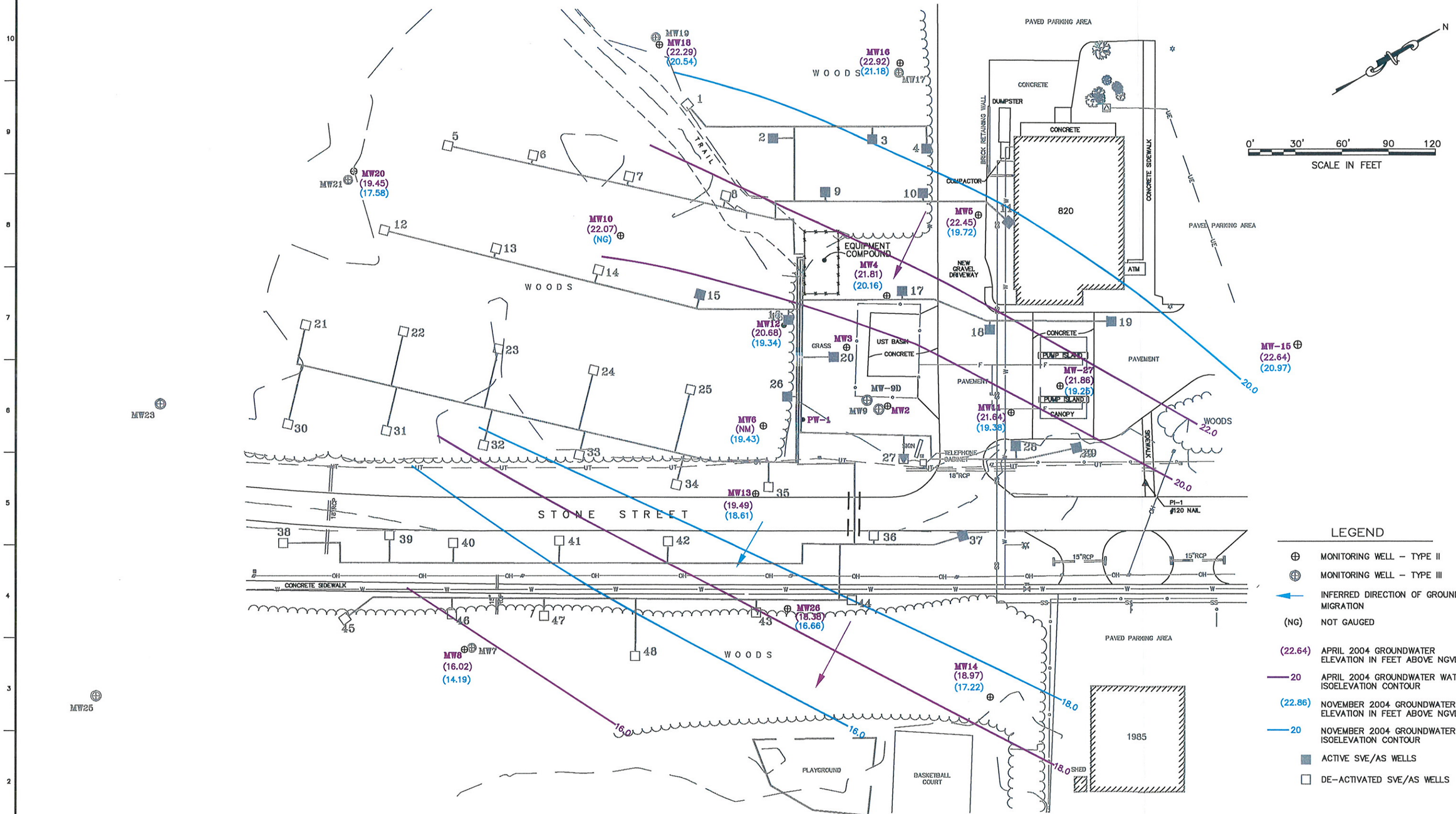
MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 2.1
ANNUAL REPORT 2004
SITE MAP/ REMEDIAL SYSTEM LAYOUT
BERKELEY MANOR 820

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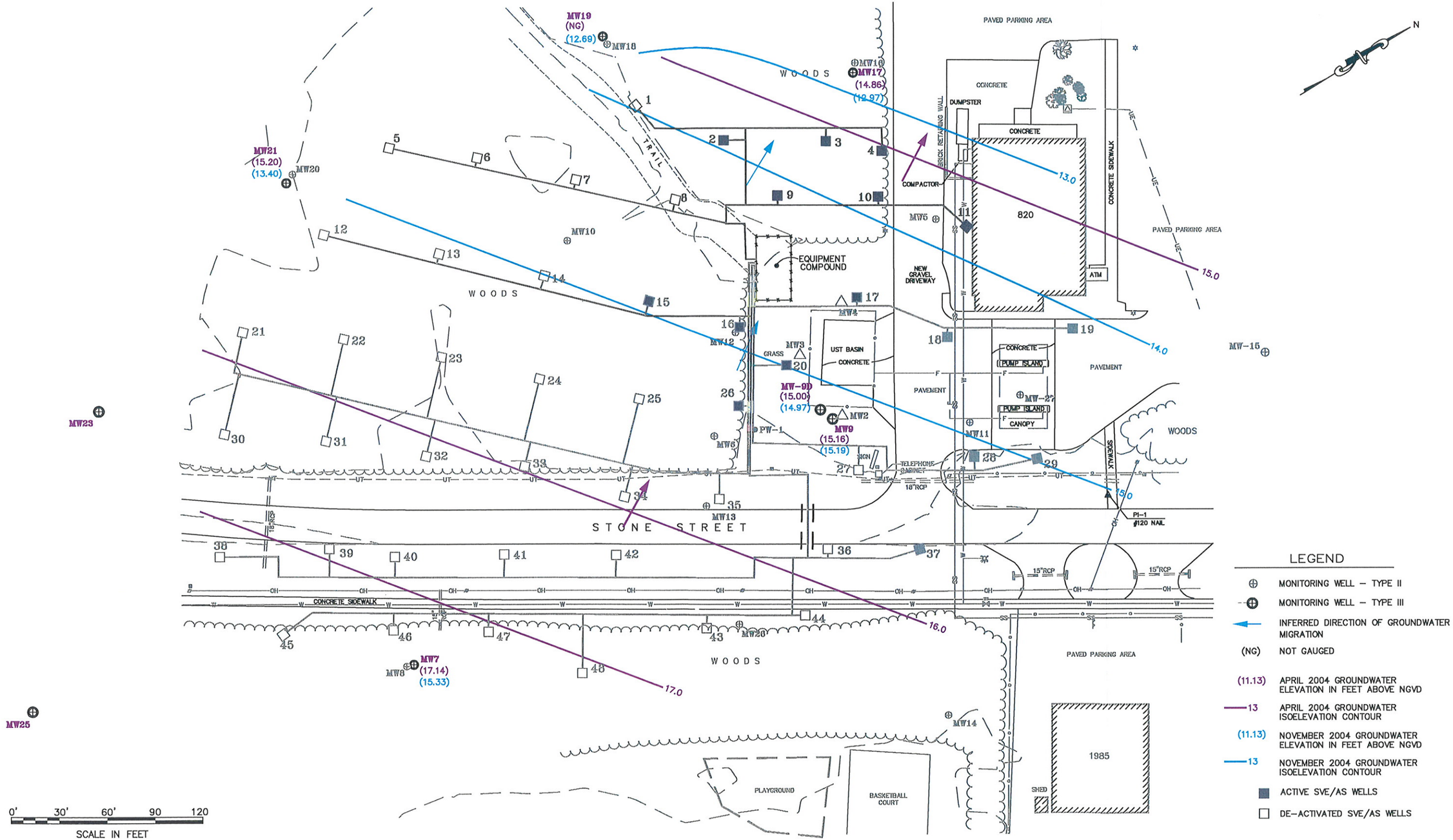
MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 4.1
ANNUAL REPORT 2004
GROUNDWATER ELEVATION CONTOUR MAP
TYPE II WELLS
BERKELEY MANOR 820

NAVFAC DRAWING NO.

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CHECKED: _____

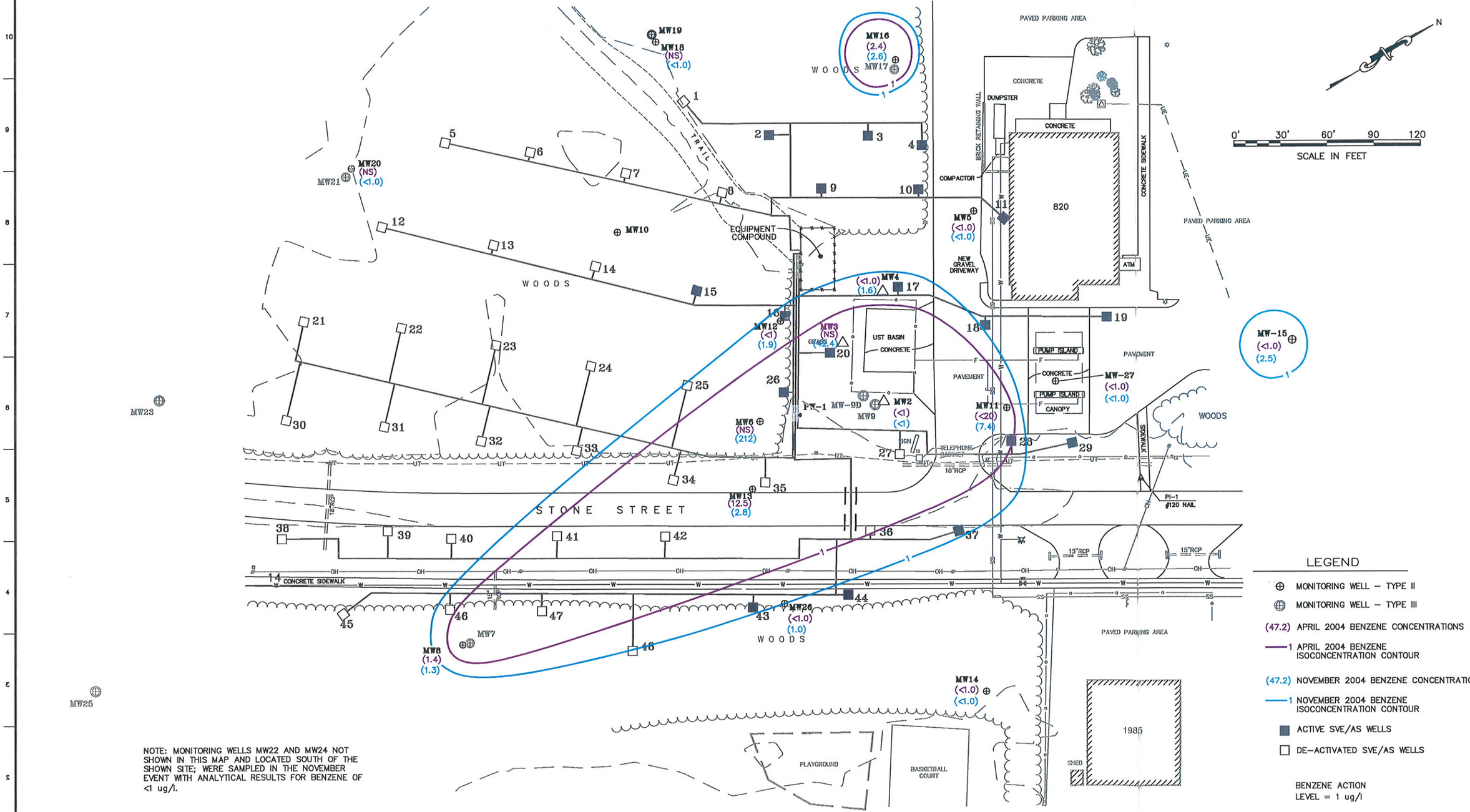
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ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINIA
MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 4.2
ANNUAL REPORT 2004
GROUNDWATER ELEVATION CONTOUR MAP
TYPE III WELLS
BERKELEY MANOR 820

NAVFAC DRAWING NO.
SHEET NUMBER: of
DATE: 3/24/05



NOTE: MONITORING WELLS MW22 AND MW24 NOT SHOWN IN THIS MAP AND LOCATED SOUTH OF THE SHOWN SITE; WERE SAMPLED IN THE NOVEMBER EVENT WITH ANALYTICAL RESULTS FOR BENZENE OF <1 ug/l.

LEGEND

- ⊕ MONITORING WELL – TYPE II
- ⊕ MONITORING WELL – TYPE III
- (47.2) APRIL 2004 BENZENE CONCENTRATIONS
- 1 APRIL 2004 BENZENE ISOCONCENTRATION CONTOUR
- (47.2) NOVEMBER 2004 BENZENE CONCENTRATIONS
- 1 NOVEMBER 2004 BENZENE ISOCONCENTRATION CONTOUR
- ■ ACTIVE SVE/AS WELLS
- □ DE-ACTIVATED SVE/AS WELLS

BENZENE ACTION LEVEL = 1 ug/l

NS = NOT SAMPLED

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APPROVED: _____ SR. PROJECT ENGINEER DATE: _____
APPROVED: _____ DEPT. MANAGER DATE: _____

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ATLANTIC DIVISION

NAVAL STATION NORFOLK, VIRGINIA

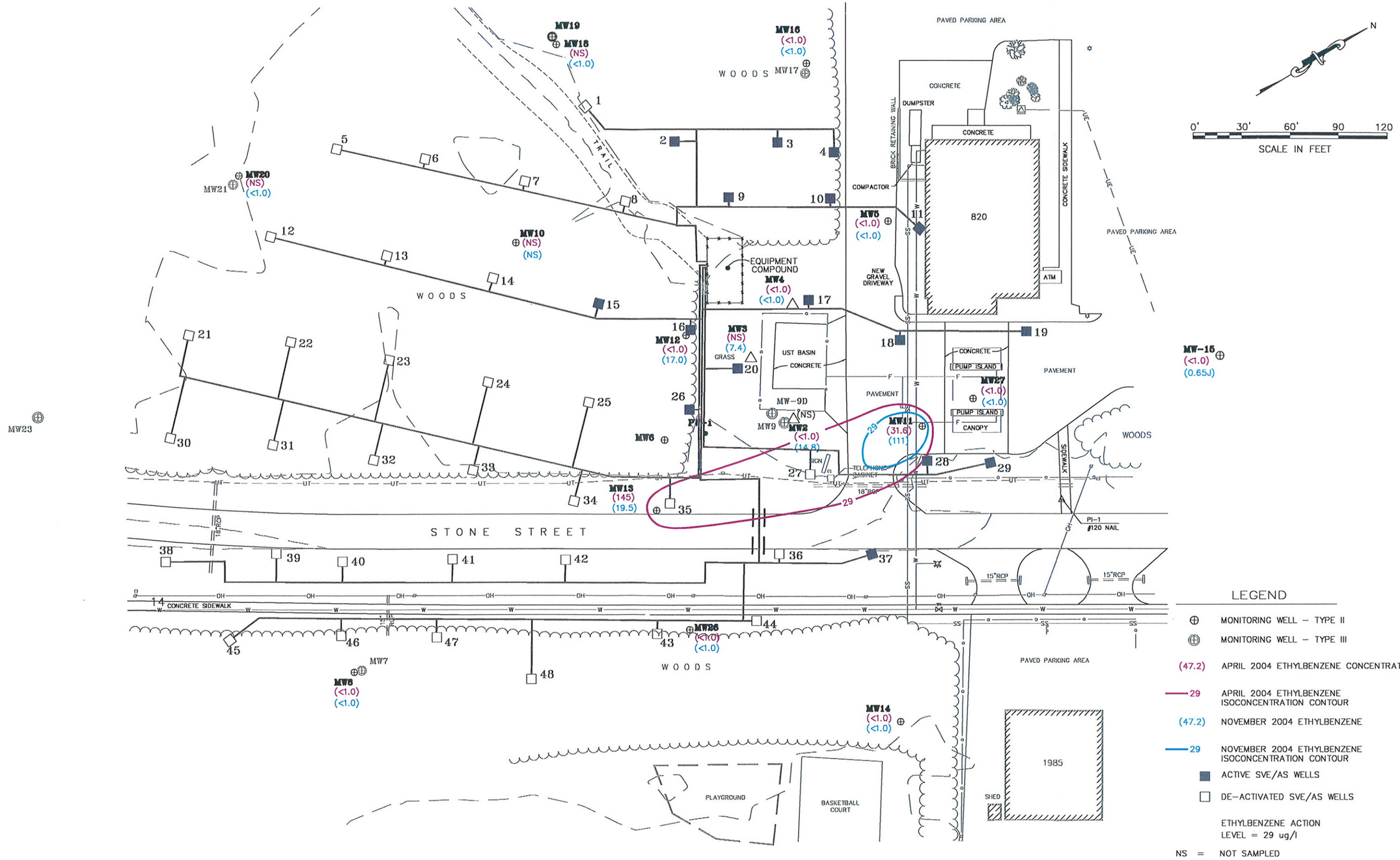
MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 4.3
ANNUAL REPORT 2004
BENZENE CONCENTRATIONS IN GROUNDWATER
TYPE II WELLS
BERKELEY MANOR 820

NAVFAC DRAWING NO.

SHEET NUMBER: of

DATE: 3/24/05



LEGEND

- ⊕ MONITORING WELL – TYPE II
- ⊕ MONITORING WELL – TYPE III
- (47.2) APRIL 2004 ETHYLBENZENE CONCENTRATIONS
- 29 APRIL 2004 ETHYLBENZENE ISOCONCENTRATION CONTOUR
- (47.2) NOVEMBER 2004 ETHYLBENZENE
- 29 NOVEMBER 2004 ETHYLBENZENE ISOCONCENTRATION CONTOUR
- ■ ACTIVE SVE/AS WELLS
- □ DE-ACTIVATED SVE/AS WELLS

ETHYLBENZENE ACTION LEVEL = 29 ug/l

NS = NOT SAMPLED

Shaw
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APPROVED: _____ SR. PROJECT ENGINEER _____ DATE: _____
APPROVED: _____ DEPT. MANAGER _____ DATE: _____

CADD FILE: _____
DRAWN: J. LANGE
DESIGNED: B. BROWN
CHECKED: R. KENYON
CHECKED: _____

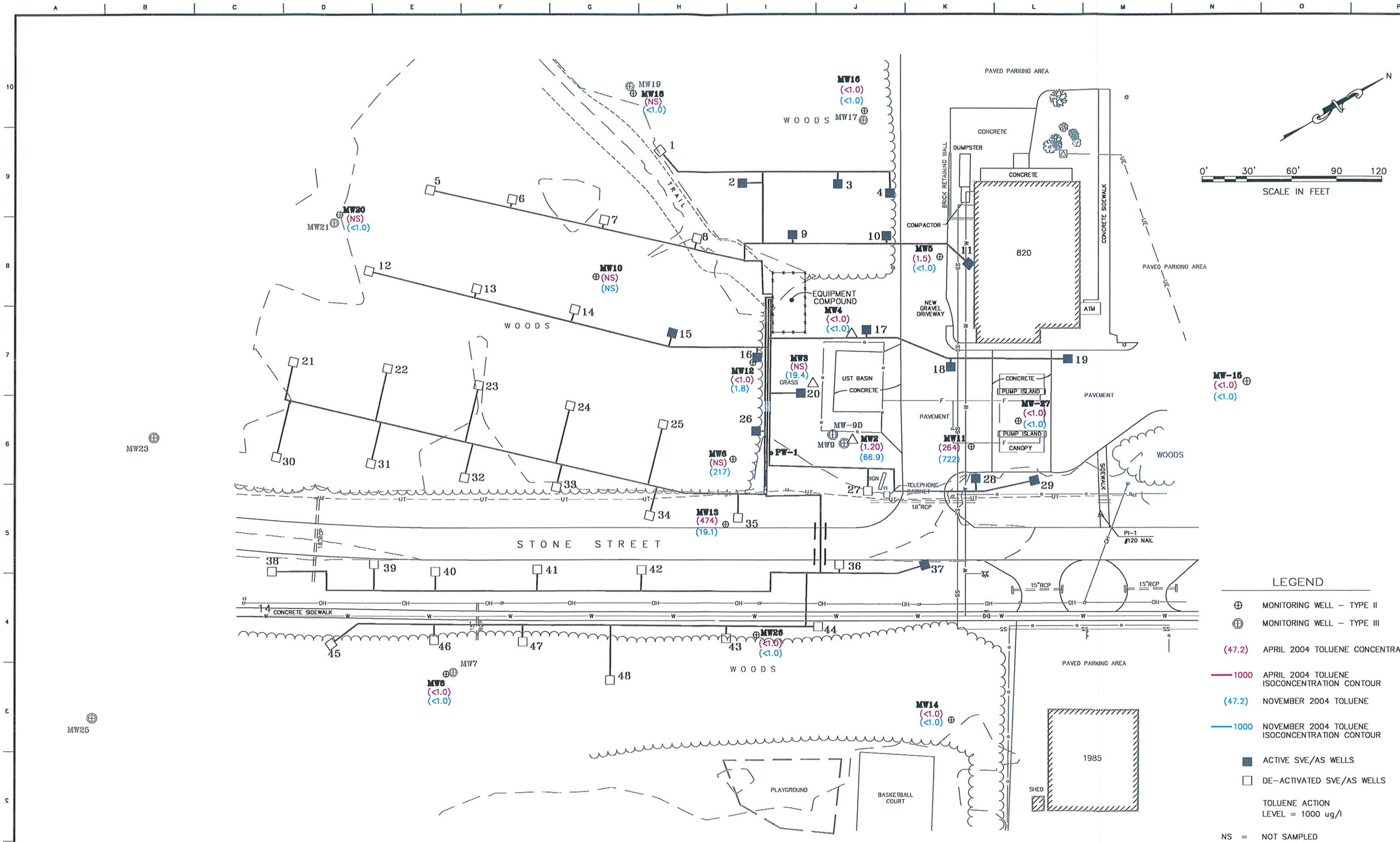
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ZONE	REV.	DESCRIPTION	BY	DATE	APP.

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINIA
MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 4.4
ANNUAL REPORT 2004
ETHYLBENZENE CONCENTRATIONS IN GROUNDWATER
TYPE II WELLS
BERKELEY MANOR 820

NAVFAC DRAWING NO.
SHEET NUMBER: of
DATE: 3/24/05



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APPROVED: _____ DEPT. MANAGER _____ DATE: _____

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DESIGNED: B. BROWN
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CHECKED: _____

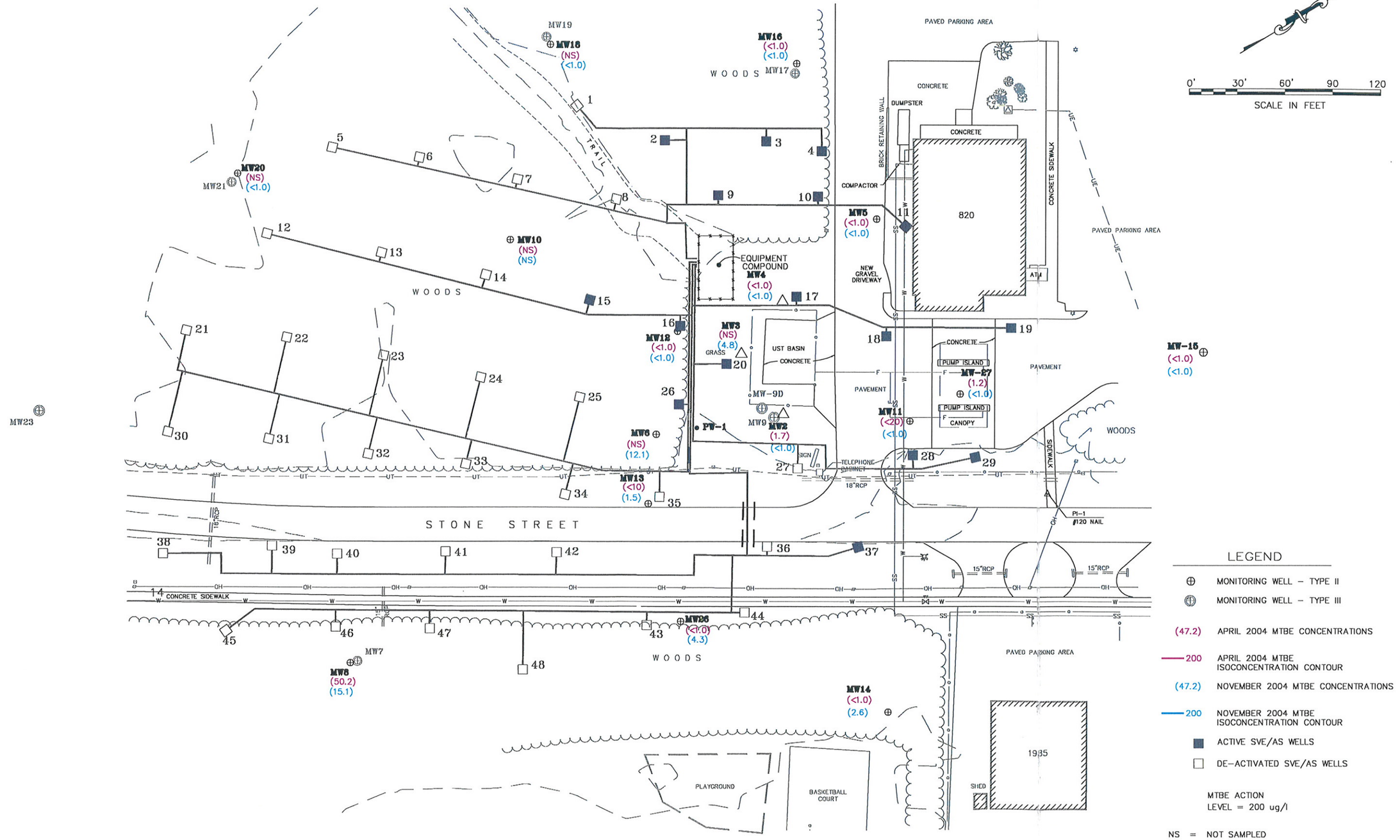
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ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINIA
MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 4.5
ANNUAL REPORT 2004
TOLUENE CONCENTRATIONS IN GROUNDWATER
TYPE II WELLS
BERKELEY MANOR 820

NAVFAC DRAWING NO.
SHEET NUMBER: of
DATE: 3/25/05



LEGEND

- ⊕ MONITORING WELL – TYPE II
- ⊕ MONITORING WELL – TYPE III
- (47.2) APRIL 2004 MTBE CONCENTRATIONS
- 200 APRIL 2004 MTBE ISOCONCENTRATION CONTOUR
- (47.2) NOVEMBER 2004 MTBE CONCENTRATIONS
- 200 NOVEMBER 2004 MTBE ISOCONCENTRATION CONTOUR
- ■ ACTIVE SVE/AS WELLS
- □ DE-ACTIVATED SVE/AS WELLS

MTBE ACTION LEVEL = 200 ug/l

NS = NOT SAMPLED

Shaw
Shaw Environmental, Inc.

SUBMITTED: _____ PROJECT MANAGER: DATE: _____
APPROVED: _____ SR. PROJECT ENGINEER DATE: _____
APPROVED: _____ DEPT. MANAGER DATE: _____

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DRAWN: J. LANGE
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CHECKED: R. KENYON
CHECKED: _____

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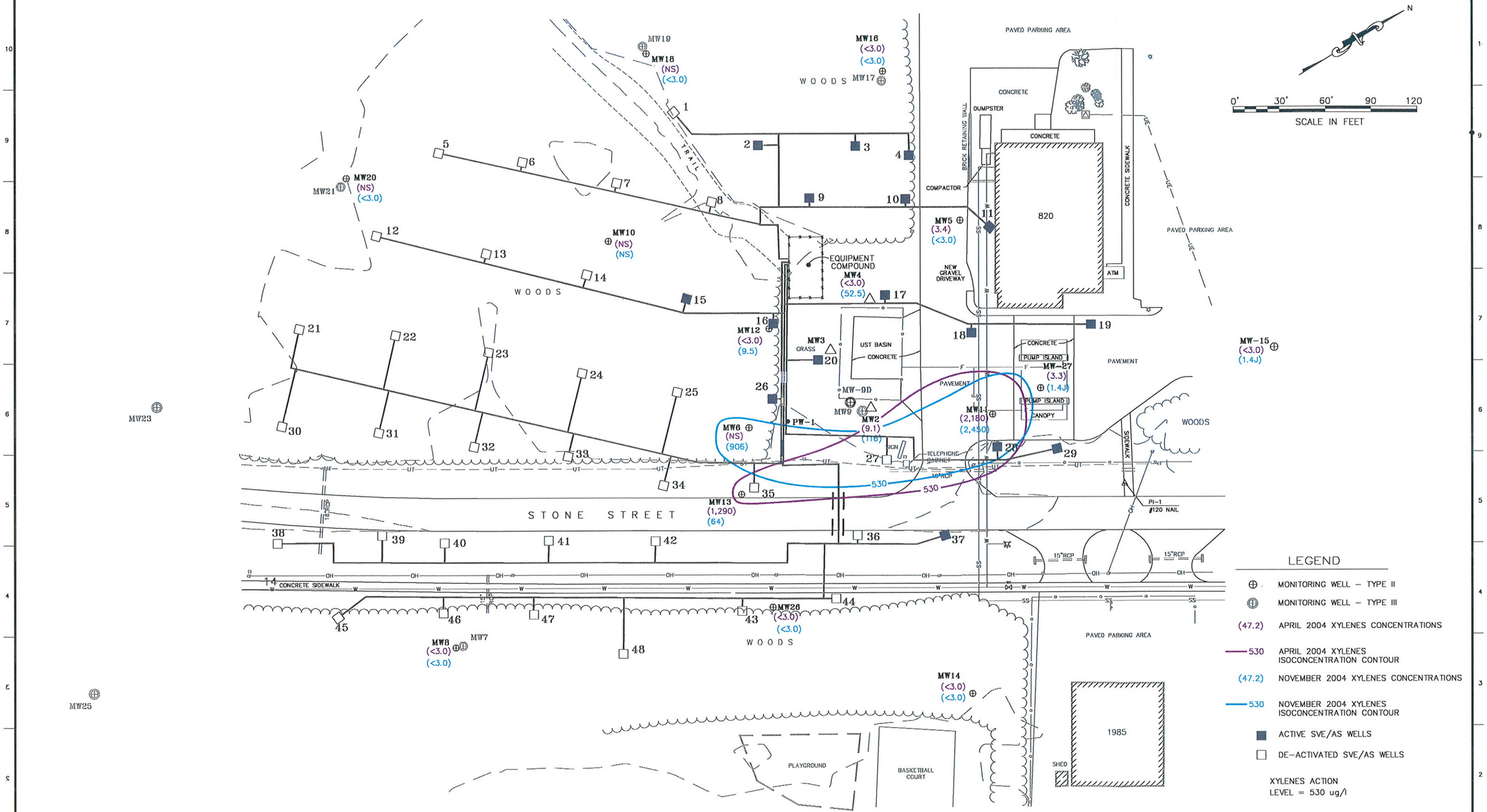
MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 4.6
ANNUAL REPORT 2004
MTBE CONCENTRATIONS IN GROUNDWATER
TYPE II WELLS
BERKELEY MANOR 820

NAVFAC DRAWING NO.

SHEET NUMBER: of

DATE: 3/24/05



LEGEND

- ⊕ MONITORING WELL – TYPE II
- ⊕ MONITORING WELL – TYPE III
- (47.2) APRIL 2004 XYLENES CONCENTRATIONS
- 530 APRIL 2004 XYLENES ISOCONCENTRATION CONTOUR
- (47.2) NOVEMBER 2004 XYLENES CONCENTRATIONS
- 530 NOVEMBER 2004 XYLENES ISOCONCENTRATION CONTOUR
- ■ ACTIVE SVE/AS WELLS
- □ DE-ACTIVATED SVE/AS WELLS

XYLENES ACTION LEVEL = 530 ug/l

NS = NOT SAMPLED

Shaw
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APPROVED: _____ DEPT. MANAGER _____ DATE: _____

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DRAWN: J. LANGE
DESIGNED: B. BROWN
CHECKED: R. KENYON
CHECKED: _____

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ATLANTIC DIVISION

NAVAL STATION NORFOLK, VIRGINIA

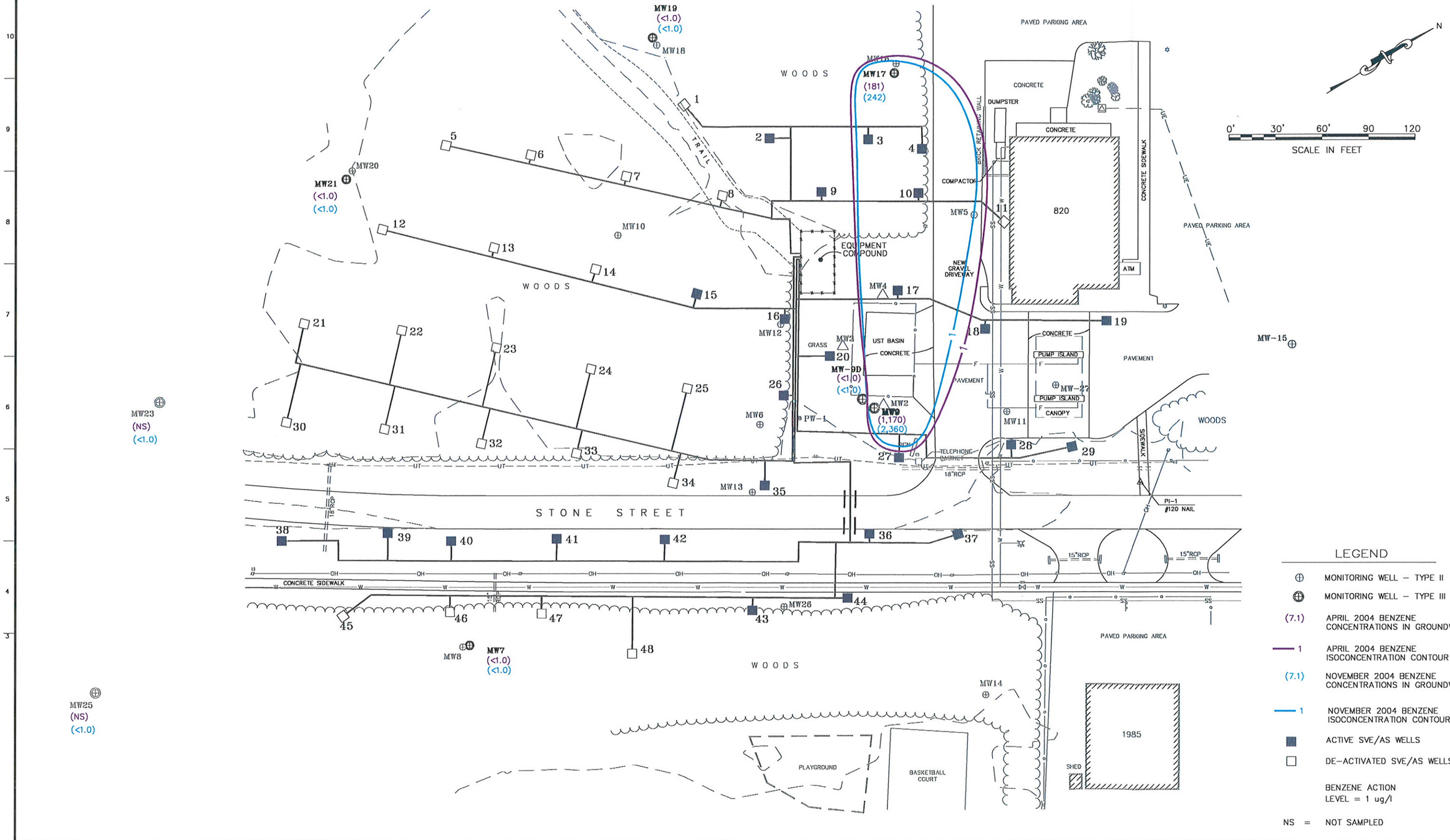
MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 4.7
ANNUAL REPORT 2004
XYLENES CONCENTRATIONS IN GROUNDWATER
TYPE II WELLS
BERKELEY MANOR 820

NAVFAC DRAWING NO.

SHEET NUMBER: of

DATE: 3/24/05



LEGEND

- ⊕ MONITORING WELL – TYPE II
- ⊕ MONITORING WELL – TYPE III
- (7.1) APRIL 2004 BENZENE CONCENTRATIONS IN GROUNDWATER
- 1 APRIL 2004 BENZENE ISOCONCENTRATION CONTOUR
- (7.1) NOVEMBER 2004 BENZENE CONCENTRATIONS IN GROUNDWATER
- 1 NOVEMBER 2004 BENZENE ISOCONCENTRATION CONTOUR
- ■ ACTIVE SVE/AS WELLS
- □ DE–ACTIVATED SVE/AS WELLS

BENZENE ACTION LEVEL = 1 ug/l

NS = NOT SAMPLED

Shaw
Shaw Environmental, Inc.

SUBMITTED: _____ PROJECT MANAGER: DATE: _____
APPROVED: _____ SR. PROJECT ENGINEER DATE: _____
APPROVED: _____ DEPT. MANAGER DATE: _____

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DESIGNED: B. BROWN
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CHECKED: _____

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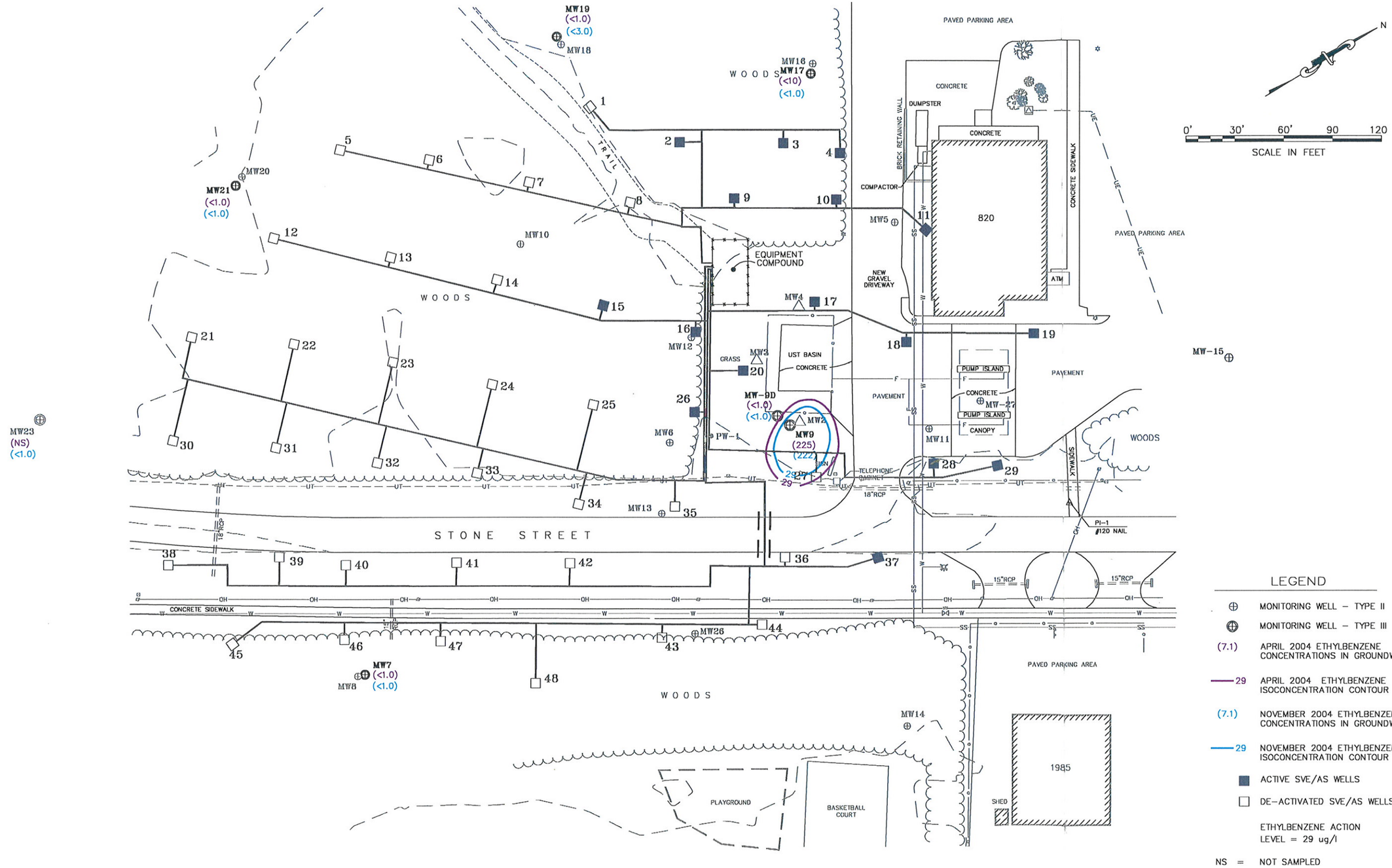
ZONE	REV.	DESCRIPTION	BY	DATE	APP.

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ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINIA

MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 4.8
ANNUAL REPORT 2004
BENZENE CONCENTRATIONS IN GROUNDWATER
TYPE III WELLS
BERKELEY MANOR 820

NAVFAC DRAWING NO.
SHEET NUMBER: of
DATE: 3/24/05



LEGEND

- ⊕ MONITORING WELL – TYPE II
- ⊕ MONITORING WELL – TYPE III
- (7.1) APRIL 2004 ETHYLBENZENE CONCENTRATIONS IN GROUNDWATER
- 29 APRIL 2004 ETHYLBENZENE ISOCONCENTRATION CONTOUR
- (7.1) NOVEMBER 2004 ETHYLBENZENE CONCENTRATIONS IN GROUNDWATER
- 29 NOVEMBER 2004 ETHYLBENZENE ISOCONCENTRATION CONTOUR
- ■ ACTIVE SVE/AS WELLS
- □ DE-ACTIVATED SVE/AS WELLS

ETHYLBENZENE ACTION LEVEL = 29 ug/l

NS = NOT SAMPLED

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APPROVED: _____ DATE: _____ SR. PROJECT ENGINEER
APPROVED: _____ DATE: _____ DEPT. MANAGER

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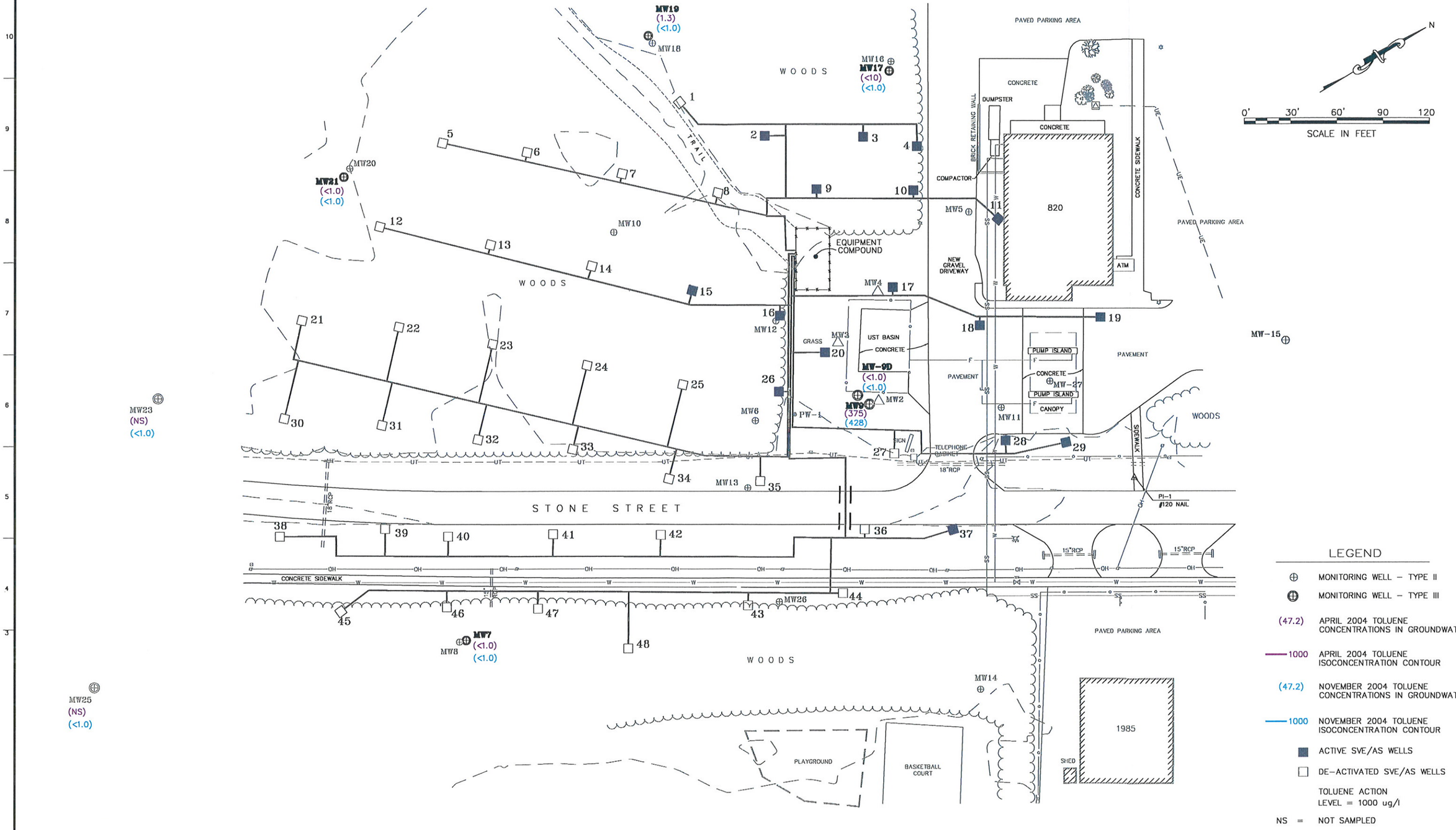
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ATLANTIC DIVISION
NAVAL STATION NORFOLK, VIRGINIA
MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 4.9
ANNUAL REPORT 2004
ETHYLBENZENE CONCENTRATIONS IN GROUNDWATER
TYPE III WELLS
BERKELEY MANOR 820

NAVFAC DRAWING NO.
SHEET NUMBER: of
DATE: 3/24/05



LEGEND

- ⊕ MONITORING WELL – TYPE II
- ⊕ MONITORING WELL – TYPE III
- (47.2) APRIL 2004 TOLUENE CONCENTRATIONS IN GROUNDWATER
- 1000 APRIL 2004 TOLUENE ISOCONCENTRATION CONTOUR
- (47.2) NOVEMBER 2004 TOLUENE CONCENTRATIONS IN GROUNDWATER
- 1000 NOVEMBER 2004 TOLUENE ISOCONCENTRATION CONTOUR
- ■ ACTIVE SVE/AS WELLS
- □ DE-ACTIVATED SVE/AS WELLS

TOLUENE ACTION LEVEL = 1000 ug/l

NS = NOT SAMPLED

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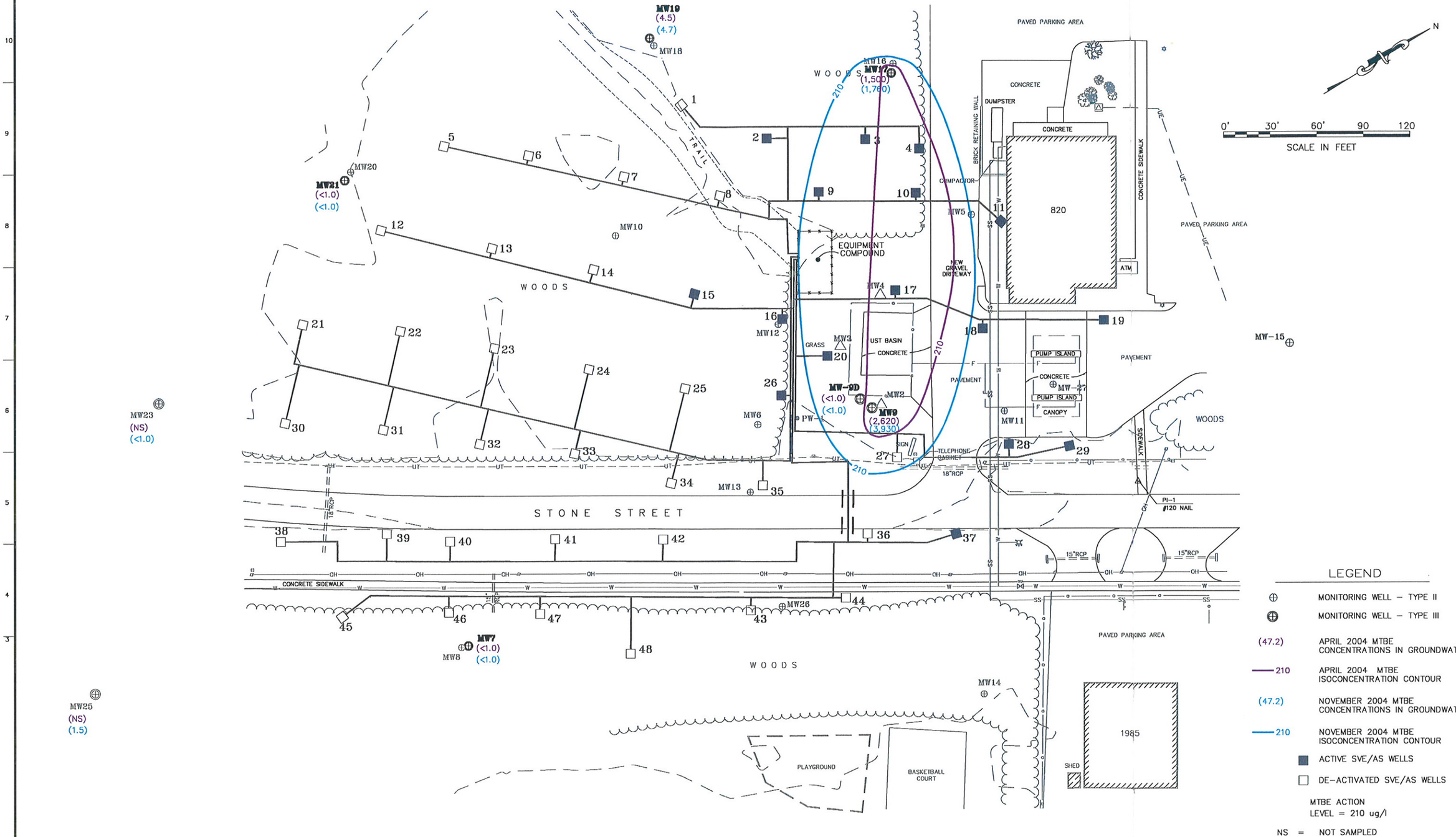
MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 4.10
ANNUAL REPORT 2004
TOLUENE CONCENTRATIONS IN GROUNDWATER
TYPE III WELLS
BERKELEY MANOR 820

NAVFAC DRAWING NO.

SHEET NUMBER: of

DATE: 3/24/05



LEGEND

- ⊕ MONITORING WELL – TYPE II
- ⊕ MONITORING WELL – TYPE III
- (47.2) APRIL 2004 MTBE CONCENTRATIONS IN GROUNDWATER
- 210 APRIL 2004 MTBE ISOCONCENTRATION CONTOUR
- (47.2) NOVEMBER 2004 MTBE CONCENTRATIONS IN GROUNDWATER
- 210 NOVEMBER 2004 MTBE ISOCONCENTRATION CONTOUR
- ■ ACTIVE SVE/AS WELLS
- □ DE-ACTIVATED SVE/AS WELLS

MTBE ACTION LEVEL = 210 ug/l

NS = NOT SAMPLED

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ATLANTIC DIVISION

NAVAL STATION NORFOLK, VIRGINIA

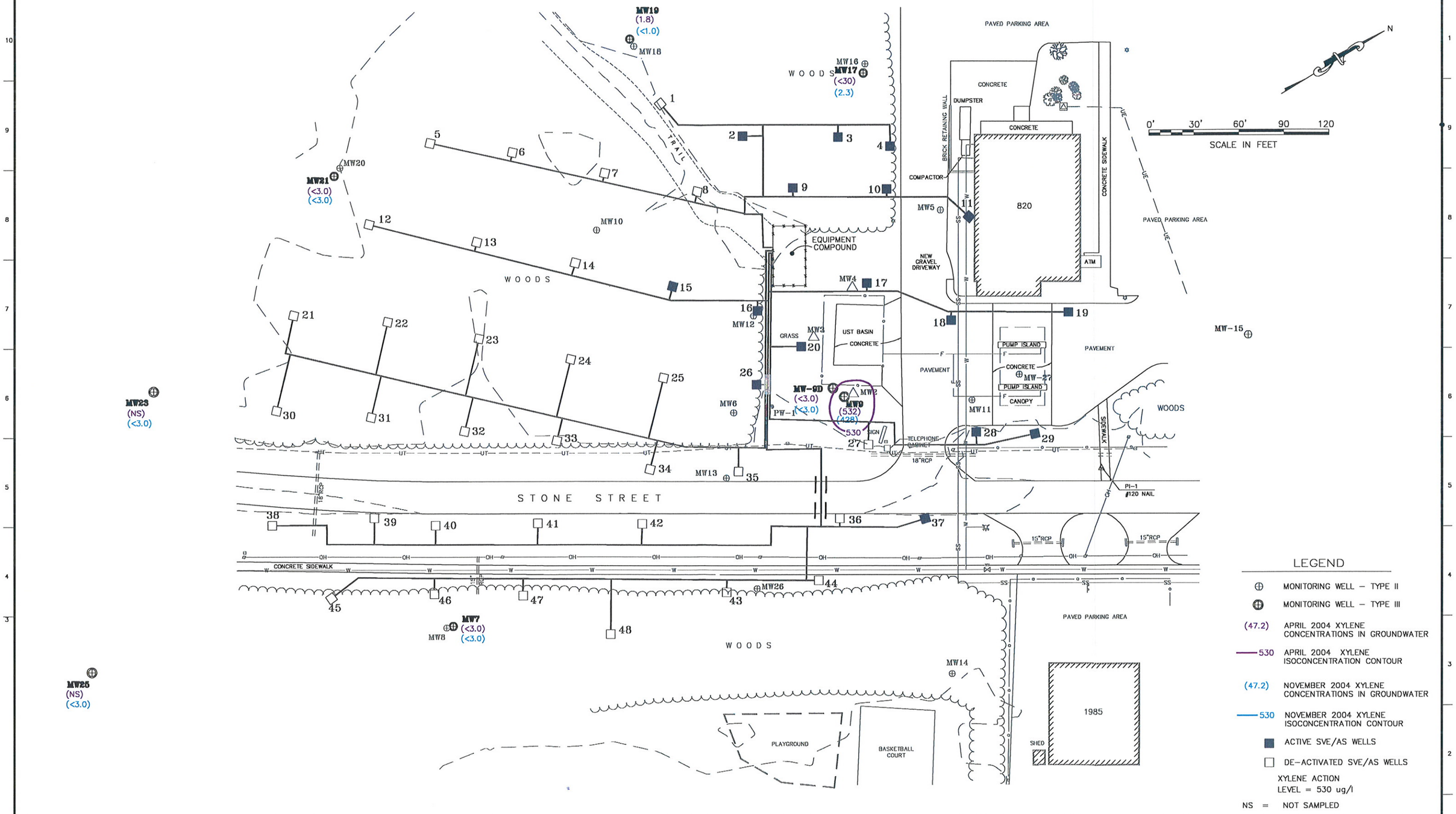
MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 4.11
ANNUAL REPORT 2004
MTBE CONCENTRATIONS IN GROUNDWATER
TYPE III WELLS
BERKELEY MANOR 820

NAVFAC DRAWING NO.

SHEET NUMBER: of

DATE: 3/24/05



LEGEND

- ⊕ MONITORING WELL – TYPE II
- ⊕ MONITORING WELL – TYPE III
- (47.2) APRIL 2004 XYLENE CONCENTRATIONS IN GROUNDWATER
- 530 APRIL 2004 XYLENE ISOCONCENTRATION CONTOUR
- (47.2) NOVEMBER 2004 XYLENE CONCENTRATIONS IN GROUNDWATER
- 530 NOVEMBER 2004 XYLENE ISOCONCENTRATION CONTOUR
- ■ ACTIVE SVE/AS WELLS
- □ DE-ACTIVATED SVE/AS WELLS

XYLENE ACTION LEVEL = 530 ug/l

NS = NOT SAMPLED

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SUBMITTED: _____ PROJECT MANAGER: _____ DATE: _____
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APPROVED: _____ DEPT. MANAGER: _____ DATE: _____

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ATLANTIC DIVISION

NAVAL STATION NORFOLK, VIRGINIA

MARINE CORPS BASE, CAMP LEJEUNE, N.C.

FIGURE 4.12
ANNUAL REPORT 2004
XYLENE CONCENTRATIONS IN GROUNDWATER
TYPE III WELLS
BERKELEY MANOR 820

NAVFAC DRAWING NO.

SHEET NUMBER: of

DATE: 3/24/05

APPENDIX A
WATER SUPPLY WELL ANALYTICAL RESULTS

GROUND WATER WELL SAMPLING REPORT
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA
AND
MARINE CORPS AIR STATION, NEW RIVER, JACKSONVILLE, NORTH CAROLINA
CONTRACT N62470-01-B-2202
NAVFAC SPECIFICATION NO. 05-01-2202

Prepared For:

G.S. Johnson, Jr.
Facilities Support Contracts Manager
Facilities Support Contracts Branch
Naval Facilities Engineering Command Contracts
1005 Michaels Road
Camp Lejeune, North Carolina 28547-2521

Prepared By:

Geological Resources, Inc.
2301 Crown Point Executive Drive, Suite F
Charlotte, North Carolina 28227

March 30, 2005

W. Scott Ball
Senior Project Scientist

John F. Hess, Jr., P.G.
Defense Contractor Representative

TABLE OF CONTENTS

I. SUMMARY

II. WELL DATA

Table 1 - Summary of Field Data
Table 2 – Summary of Laboratory Analyses – Ground Water Samples

III. LABORATORY DATA

Laboratory Analytical Report
Chain of Custody Forms
Field Notes

I. SUMMARY

SUMMARY

The purpose of this report is to present results of ground water sampling activities conducted between January 25 and 27, 2005 at the Marine Corps Base, Camp Lejeune and the Marine Corps Air Station, New River, Jacksonville, North Carolina. The sampling was conducted in accordance with the requirements outlined in Contract N62470-01-B-2202, NAVFAC Specification No. 05-01-2202 set forth by the Facilities Support Contracts Branch at Camp Lejeune Marine Corps Base in Jacksonville, North Carolina. A total of 61 ground water wells were visited, 59 of which were sampled. Ground water samples could not be collected from wells HP646 and HP5186 because they were reportedly not in service.

Ground water samples were collected following the sampling protocol outlined in the Quality Assurance/Quality Control Plan maintained by Geological Resources, Inc. Prior to sample collection, each well was purged of an adequate volume of water to obtain a representative ground water sample. Information collected at each wellhead included the well identification number, number of samples collected, date and time of sample collection and the ground water pH of the sample collected (**Table 1**). The ground water pH was measured using a Horiba Water Quality Meter. Prior to pH measurement, the Horiba was properly calibrated according to the manufacturer's specifications. Samples were collected directly from the spigot by the on-site geologist wearing clean, disposable latex gloves. Samples were collected in laboratory supplied glassware and immediately placed on ice in laboratory supplied coolers. At the completion of the sampling event, sample coolers were forwarded to the State-certified laboratory via FedEx.

Laboratory analysis was performed on each of the well samples, trip blanks and method blanks using EPA Method 524.2. No detectable concentrations of Method 524.2 constituents were detected in any of the water samples collected during the January 2005 sampling event. A summary of laboratory analyses of the ground water samples collected on January 25-27, 2005 is presented in **Table 2**. An original copy of the complete laboratory analytical report and chain of custody documentation has also been attached.

II. WELL DATA

TABLE 1
SUMMARY OF FIELD DATA
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA
AND
MARINE CORPS AIR STATION, NEW RIVER, JACKSONVILLE, NORTH CAROLINA

Well Number	Date Sampled	Time Sampled	Number of Samples	pH (S.U.)
646	01/25/05	NS[1]	1	NS
647	01/25/05	08:45	1	5.6
705	01/25/05	08:53	1	6.1
703	01/25/05	09:21	1	6.3
704	01/25/05	09:26	1	6.4
644	01/25/05	09:48	1	6.3
643	01/25/05	10:00	1	7.1
700	01/25/05	10:10	1	6.9
701	01/25/05	10:22	1	6.02
5186	01/25/05	NS	1	NS
607	01/25/05	10:54	1	7.3
623	01/25/05	11:16	3	6.5
622	01/25/05	11:33	1	NM2
650	01/25/05	12:45	1	6.7
663	01/25/05	12:50	1	6.7
711	01/25/05	13:02	1	6.6
614	01/25/05	13:13	1	6.8
619	01/25/05	13:24	1	6.8
618	01/25/05	13:31	1	6.7
557	01/25/05	13:52	1	6.9
617	01/25/05	14:25	1	6.9
584	01/25/05	14:38	3	6.8
558	01/25/05	15:10	1	7.0
4009	01/25/05	15:20	1	6.8
654	01/25/05	15:38	1	7.0
629	01/26/05	08:40	1	6.8
621	01/26/05	08:45	1	7.4
620	01/26/05	08:54	1	7.3
709	01/26/05	09:15	1	7.4
710	01/26/05	09:26	1	6.9
641	01/26/05	09:35	1	7.2
611	01/26/05	10:02	3	7.1

TABLE 1 (cont'd.)
SUMMARY OF FIELD DATA
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA
AND
MARINE CORPS AIR STATION, NEW RIVER, JACKSONVILLE, NORTH CAROLINA

Well Number	Date Sampled	Time Sampled	Number of Samples	pH (S.U.)
612	1/26/2005	10:07	1	NM
652	01/26/05	10:22	1	7.3
642	01/26/05	10:30	1	7.2
661	01/26/05	10:50	1	7.2
628	01/26/05	11:03	1	7.5
606	01/26/05	11:11	1	6.9
640	01/26/05	13:08	1	7.5
632	01/26/05	13:12	1	7.1
595	01/26/05	13:19	1	7.1
596	01/26/05	13:29	3	7.2
585	01/26/05	13:42	1	7.3
BA45	01/26/05	14:02	1	7.1
BA190	01/26/05	14:09	1	7.1
BB280	01/26/05	14:40	1	7.3
BB218	01/26/05	15:06	1	7.3
BB281	01/26/05	15:14	1	7.1
BB221	01/27/05	08:53	1	7.1
BB220	01/27/05	09:00	1	7.2
BB44	01/27/05	09:06	1	7.3
BB47	01/27/05	09:23	3	7.0
VL105	01/27/05	10:15	1	6.8
VL104	01/27/05	10:26	1	7.1
VL103	01/27/05	10:44	1	7.0
VL101	01/27/05	10:51	1	7.2
VL102	01/27/05	11:03	1	7.1
AS190	01/27/05	11:41	1	7.3
AS191	01/27/05	11:46	1	7.2
AS4150	01/27/05	13:03	1	7.6
AS5001	01/27/05	13:08	1	7.6
TC1253	01/27/05	13:28	3	6.9

Notes:
1. Not sampled; no power to well or pump has been dismantled.
2. Not measured.

TABLE 2

SUMMARY OF LABORATORY ANALYSES[1]

GROUND WATER SAMPLES

JANUARY 25-27, 2005

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA

AND

MARINE CORPS AIR STATION, NEW RIVER, JACKSONVILLE, NORTH CAROLINA

	<0.50000[2]	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000
	<0.50000

TABLE 2 (cont'd.)
SUMMARY OF LABORATORY ANALYSES
GROUND WATER SAMPLES
JANUARY 25-27, 2005
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA
AND
MARINE CORPS AIR STATION, NEW RIVER JACKSONVILLE, NORTH CAROLINA

	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000

TABLE 2 (cont'd.)
SUMMARY OF LABORATORY ANALYSES
GROUND WATER SAMPLES
JANUARY 25-27, 2005
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA
AND
MARINE CORPS AIR STATION, NEW RIVER, JACKSONVILLE, NORTH CAROLINA

[redacted]											
[redacted]	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000

TABLE 2 (cont'd.)
SUMMARY OF LABORATORY ANALYSES
GROUND WATER SAMPLES
JANUARY 25-27, 2005
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA
AND
MARINE CORPS AIR STATION, NEW RIVER, JACKSONVILLE, NORTH CAROLINA

	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000

TABLE 2 (cont'd.)
SUMMARY OF LABORATORY ANALYSES
GROUND WATER SAMPLES
JANUARY 25-27, 2005
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA
AND
MARINE CORPS AIR STATION, NEW RIVER, JACKSONVILLE, NORTH CAROLINA

	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000

TABLE 2 (cont'd.)
SUMMARY OF LABORATORY ANALYSES
GROUND WATER SAMPLES
JANUARY 25-27, 2005
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA
AND
MARINE CORPS AIR STATION, NEW RIVER, JACKSONVILLE, NORTH CAROLINA

[redacted]					
[redacted]	<0.50000	<0.50000	<0.50000	<0.50000	<0.50000

APPENDIX B

GROUNDWATER SAMPLE COLLECTION FIELD LOGS

Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098	
PROJECT NAME: BM 820	
WELL NO. MW07	
SAMPLE NO.UST820-MW07	
PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt
PHONE: 910-451-2390	WEATHER: sunny 65°
LEL:	
PID:	Sampling Device: Bailer

DATE 4.26.07

TIME 1115

Well Locked: [X] Yes

☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	4.44	4.61	4.65	4.14			(STD)
Specific Conductivity	.150	.109	.027	.086			(m S/cm°)
Turbidity (Turb)	——	PROBE NOT WORKING		——			(NTU)
Dissolved Oxygen (DO)	-.23	-1.33	-2.09	-2.37			(g/l)
Temperature (Temp)	16.90	16.20	16.22	16.31			(°C)
ORP	321.4	301.4	334.8	366.7			

Depth to Bottom	285.60	(In) (Minus)	Depth to Water	120.48	(In)	=	165.12	HT (in)
Depth to Bottom	23.80	(Ft) (Minus)	Depth to Water	10.04	(Ft)	=	13.76	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)

r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	519	.0043	2.2		6.73	7
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098
PROJECT NAME: BM 820
WELL NO. MW-09
SAMPLE NO.UST820- MW09

PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt	DATE 4.14.04
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt	TIME 1040
PHONE: 910-451-2390	WEATHER: cloudy	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	3.49	2.81	2.79	2.79			(STD)
Specific Conductivity	6.017	7.501	7.679	7.290			(m S/cm°)
Turbidity (Turb)	865.0	245.9	223.1	19.9			(NTU)
Dissolved Oxygen (DO)	2.96	-4.66	-3.68	-1.93			(g/l)
Temperature (Temp)	20.20	24.54	24.34	24.47			(°C)
ORP	467.2	455.1	447.6	425.4			

Depth to Bottom	625.20	(In) (Minus)	Depth to Water	201.48	(In)	=	423.72	HT (in)
Depth to Bottom	52.10	(Ft) (Minus)	Depth to Water	16.79	(Ft)	=	35.31	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	1330	.0043	5.7		~~16.95~~	17
Middle					3.14		.0043			17.2	
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098	
PROJECT NAME: BM 820	
WELL NO. MW9D	
SAMPLE NO.UST820- MW9D	
PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt — DATE 4.14.04
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt — TIME 1135
PHONE: 910-451-2390	WEATHER: Cloudy
LEL:	Well Locked: [X] Yes
PID:	Sampling Device: Bailer — ☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	4.24	5.99	6.46	6.53			(STD)
Specific Conductivity	.352	.310	.307	.306			(m S/cm°)
Turbidity (Turb)	20.1	18.2	10.4	9.2			(NTU)
Dissolved Oxygen (DO)	-3.28	-4.89	-5.63	-5.61			(g/l)
Temperature (Temp)	22.28	22.32	22.23	22.23			(°C)
ORP	264.3	17.2	-54.5	-65.1			

Depth to Bottom	1228.56	(In) (Minus)	Depth to Water	210.43	(In)	=	1018.13	HT (in)
Depth to Bottom	102.38	(Ft) (Minus)	Depth to Water	17.54	(Ft)	=	84.84	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)

r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	3197	.0043	13.7		~~40.72~~	41
Middle					3.14		.0043			41.2	
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098	
PROJECT NAME: BM 820	
WELL NO. MW 17	
SAMPLE NO.UST820- MW17	
PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt
PHONE: 910-451-2390	WEATHER: Sunny 55°
LEL:	Well Locked: [X] Yes
PID:	Sampling Device: Bailer

DATE 4.15.04
TIME 0950
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	3.02	2.62	2.64	2.66			(STD)
Specific Conductivity	7.528	9.965	9.066	8.335			(m S/cm°)
Turbidity (Turb)			PROBE NOT WORKING				(NTU)
Dissolved Oxygen (DO)	5.31	-2.68	-2.99	-3.44			(g/l)
Temperature (Temp)	20.95	23.31	23.76	23.93			(°C)
ORP	466.9	450.9	445.0	437.7			

Depth to Bottom	619.20	(In) (Minus)	Depth to Water	212.64	(In)	=	406.56	HT (in)
Depth to Bottom	51.60	(Ft) (Minus)	Depth to Water	17.72	(Ft)	=	33.88	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1
d/2 = 1

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	1277	.0043	5.5		~~16.20~~	17
Middle					3.14		.0043			16.5	
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098	
PROJECT NAME: BM 820	
WELL NO. MW19	
SAMPLE NO.UST820- MW19	
PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt
PHONE: 910-451-2390	WEATHER: 70° + Sunny
LEL:	Well Locked: [X] Yes
PID:	Sampling Device: Bailer

DATE 4-16-04
TIME 1400
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	3.21	2.75	2.70	2.52			(STD)
Specific Conductivity	13.52	13.28	15.08	15.60			(m S/cm°)
Turbidity (Turb)	———	@ PROBE NOT WORKING			———		(NTU)
Dissolved Oxygen (DO)	-1.33	1.92	2.07	2.99			(g/l)
Temperature (Temp)	20.40	22.08	22.01	23.53			(°C)
ORP	345.7	368.8	367.1	312.5			

Depth to Bottom	619.20	(In) (Minus)	Depth to Water	205.92	(In)	=	413.28	HT (in)
Depth to Bottom	@51.60	(Ft) (Minus)	Depth to Water	17.16	(Ft)	=	34.44	HT (ft)

d = 2
r = 1
d/2 = 1

MEASUREMENTS (IN INCHES)
Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS	Purge Vol.	Vol. Purged
TOP				1	3.14	1298	.0043	5.6	~~10.55~~	17
Middle					3.14		.0043		16.7	
Bottom					3.14		.0043			
Total					3.14		.0043			

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098	
PROJECT NAME: BM 820	
WELL NO. MW21	
SAMPLE NO.UST820- MW21	
PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt
PHONE: 910-451-2390	WEATHER: Sunny 70°
LEL:	Well Locked: [X] Yes
PID:	Sampling Device: Bailer

DATE 4.16.07
TIME 1500
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	3.30	3.22	3.23	3.23			(STD)
Specific Conductivity	1.737	1.295	1.738	1.754			(m S/cm°)
Turbidity (Turb)	———	PROBE NOT WORKING					(NTU)
Dissolved Oxygen (DO)	-3.02	-4.09	-4.32	-4.19			(g/l)
Temperature (Temp)	19.60	19.60	20.19	20.20			(°C)
ORP	381.9	408.9	325.7	326.4			

Depth to Bottom	621.60	(In) (Minus)	Depth to Water	199.20	(In)	=	422.40	HT (in)
Depth to Bottom	51.50	(Ft) (Minus)	Depth to Water	16.60	(Ft)	=	35.2	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together
d/2 = 1

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	1326	.0043	5.7		~~16.90~~	17
Middle					3.14		.0043			17.1	
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098	
PROJECT NAME: BM 820	
WELL NO. MW02	
SAMPLE NO.UST820-MW02	
PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt
PHONE: 910-451-2390	WEATHER: Cloudy
LEL:	
PID:	Sampling Device: Bailer

DATE 4.14.04
TIME 1500
Well Locked: [X] Yes
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	8.17	7.89	7.26	7.03			(STD)
Specific Conductivity	.145	.144	.161	.181			(m S/cm°)
Turbidity (Turb)	25.8	4.3	6.5	5.4			(NTU)
Dissolved Oxygen (DO)	3.64	1.93	.12	5.83			(g/l)
Temperature (Temp)	17.83	17.91	17.80	17.78			(°C)
ORP	179.3	179.0	142.5	79.2			

Depth to Bottom	258.96	(In) (Minus)	Depth to Water	138.12	(In)	=	120.84	HT (in)
Depth to Bottom	21.58	(Ft) (Minus)	Depth to Water	11.51	(Ft)	=	10.07	HT (ft)

d = 24 MEASUREMENTS (IN INCHES)
r = 1
d/2 = 1

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS	Purge Vol.	Vol. Purged
TOP				1	3.14	1518	.0043	6.5	6.58	7
Middle					3.14		.0043		19.6	
Bottom					3.14		.0043			
Total					3.14		.0043			

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐

Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098
PROJECT NAME: BM 820
WELL NO. MW04
SAMPLE NO.UST820- MW04

PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt	DATE 4.15.04
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt	TIME 1215
PHONE: 910-451-2390	WEATHER: Sunny 60°	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	4.66	4.71	4.74	4.69			(STD)
Specific Conductivity	.161	.148	.143	.149			(m S/cm°)
Turbidity (Turb)		PROBE NOT WORKING					(NTU)
Dissolved Oxygen (DO)	4.05	-.15	-.23	-.46			(g/l)
Temperature (Temp)	18.66	18.59	19.70	19.79			(°C)
ORP	282.9	298.7	326.3	337.1			

Depth to Bottom	270.60	(In) (Minus)	Depth to Water	138.48	(In)	=	132.12	HT (in)
Depth to Bottom	22.55	(Ft) (Minus)	Depth to Water	11.54	(Ft)	=	11.01	HT (ft)

d = ~~X~~ 4 MEASUREMENTS (IN INCHES)
r = 1
Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS	Purge Vol.	Vol. Purged
TOP				1	3.14	1659	.0043	7.1	~~21.5~~ 22	
Middle					3.14		.0043		21.4	
Bottom					3.14		.0043			
Total					3.14		.0043			

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098	
PROJECT NAME: BM 820	
WELL NO. MW05	
SAMPLE NO.UST820-	
PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt
PHONE: 910-451-2390	WEATHER: RAIN
LEL:	Well Locked: [X] Yes
PID:	Sampling Device: Bailer

DATE 4-13-07
TIME 1345
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH							(STD)
Specific Conductivity							(m S/cm°)
Turbidity (Turb)							(NTU)
Dissolved Oxygen (DO)							(g/l)
Temperature (Temp)							(°C)
ORP							

Depth to Bottom	156.00	(In) (Minus)	Depth to Water	94.44	(In)	=	61.56	HT (in)
Depth to Bottom	13.00	(Ft) (Minus)	Depth to Water	7.87	(Ft)	=	5.13	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS	Purge Vol.	Vol. Purged
TOP				1	3.14	193	.0043	.08	2.46	3
Middle					3.14		.0043			
Bottom					3.14		.0043			
Total					3.14		.0043			

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS: NO FIELD MEASUREMENTS. HAND BAILED WELL

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098
PROJECT NAME: BM 820
WELL NO. MW8
SAMPLE NO.UST820- MW8

PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt	DATE 4.20.04
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt	TIME 1030
PHONE: 910-451-2390	WEATHER: sunny	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	2.90	2.79	2.80	1.40			(STD)
Specific Conductivity	1.259	1.291	1.175	1.156			(m S/cm°)
Turbidity (Turb)	———	Probe not working		———			(NTU)
Dissolved Oxygen (DO)	2.53	-.03	-1.90	1.229			(g/l)
Temperature (Temp)	19.56	19.32	20.00	20.51			(°C)
ORP	539.0	564.5	562.4	-49.1			

Depth to Bottom	590.40	(In) (Minus)	Depth to Water	133.80	(In)	=	456.60	HT (in)
Depth to Bottom	49.20	(Ft) (Minus)	Depth to Water	11.15	(Ft)	=	38.05	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	1434	.0043	~~1739~~ 6.2		18.6	19
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098
PROJECT NAME: BM 820
WELL NO. MW1C
SAMPLE NO.UST820- MW1C — NOT TAKEN

PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt	DATE 4-26-04
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt	TIME 0930
PHONE: 910-451-2390	WEATHER: sunny 60°	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH							(STD)
Specific Conductivity							(m S/cm°)
Turbidity (Turb)							(NTU)
Dissolved Oxygen (DO)							(g/l)
Temperature (Temp)							(°C)
ORP							

Depth to Bottom		(In) (Minus)	Depth to Water		(In)	=	HT (in)
Depth to Bottom		(Ft) (Minus)	Depth to Water		(Ft)	=	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together
d/2 = 1

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14		.0043				
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS: System shut down sunday morning. well is still bubbling too much to sample

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098
PROJECT NAME: BM 820
WELL NO. MW11
SAMPLE NO.UST820- MW11 & MW11 DUP

PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt	DATE 4.16.04
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt	TIME 0945 / 0952
PHONE: 910-451-2390	WEATHER: Sunny 55°	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	4.99	4.96	5.00	4.96			(STD)
Specific Conductivity	.296	.309	.247	.244			(m S/cm°)
Turbidity (Turb)		Probe Not Working					(NTU)
Dissolved Oxygen (DO)	3.27	1.90	.31	.84			(g/l)
Temperature (Temp)	21.18	21.60	22.15	22.23			(°C)
ORP	263.3	256.7	111.1	98.0			

Depth to Bottom	240.00	(In) (Minus)	Depth to Water	91.80	(In)	=	190.20	HT (in)
Depth to Bottom	23.50	(Ft) (Minus)	Depth to Water	7.65	(Ft)	=	15.85	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	597	.0043	2.6		~~7.0~~	8
Middle					3.14		.0043			7.7	
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS: DUPLICATE SAMPLE TAKEN

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098
PROJECT NAME: BM 820
WELL NO. MW12
SAMPLE NO.UST820- MW12

PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt	DATE 4.14.04
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt	TIME 1545
PHONE: 910-451-2390	WEATHER: cloudy	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	6.30	5.52	5.13	4.93			(STD)
Specific Conductivity	.070	.068	.074	.077			(m S/cm°)
Turbidity (Turb)	121.6	103.4	75.6	23.1			(NTU)
Dissolved Oxygen (DO)	7.55	5.99	5.24	5.29			(g/l)
Temperature (Temp)	16.58	17.30	18.01	17.69			(°C)
ORP	165.0	223.5	252.2	266.6			

Depth to Bottom	304.20	(In) (Minus)	Depth to Water	132.60	(In)	=	171.60	HT (in)
Depth to Bottom	25.35	(Ft) (Minus)	Depth to Water	11.05	(Ft)	=	14.30	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	537	.0043	2.3		~~6.8~~	7
Middle					3.14		.0043			7.0	
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098	
PROJECT NAME: BM 820	
WELL NO. MW13	
SAMPLE NO.UST820-MW13	

PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt	DATE 4.14.09
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt	TIME 1410
PHONE: 910-451-2390	WEATHER: cloudy	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	7.45	7.20	6.14	6.03			(STD)
Specific Conductivity	.091	.166	.123	.117			(m S/cm°)
Turbidity (Turb)	87.8	43.9	10.1	9.6			(NTU)
Dissolved Oxygen (DO)	7.16	-1.89	-2.02	-.41			(g/l)
Temperature (Temp)	16.90	16.96	18.05	19.13			(°C)
ORP	121.9	73.6	10.8	3.1			

Depth to Bottom	306.24	(In) (Minus)	Depth to Water	115.44	(In)	=	190.80	HT (in)
Depth to Bottom	25.52	(Ft) (Minus)	Depth to Water	9.62	(Ft)	=	15.9	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1
d/2 = 1

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	559	.0043	2.6		~~7.03~~	8
Middle					3.14		.0043			7.7	
Bottom					3.14		.0043				
Total					3.14		.0043				

Multiply Together

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098
PROJECT NAME: BM 820
WELL NO. MW14
SAMPLE NO.UST820- MW14

PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt	DATE 4.15.04
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt	TIME 1500
PHONE: 910-451-2390	WEATHER: Sunny 60°	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	4.82	4.93	4.94	4.96			(STD)
Specific Conductivity	.070	.062	.062	.062			(m S/cm°)
Turbidity (Turb)	———	PROBE	NOT WORKING	———			(NTU)
Dissolved Oxygen (DO)	4.01	-2.24	-2.56	-2.63			(g/l)
Temperature (Temp)	17.91	17.62	17.53	17.62			(°C)
ORP	289.2	247.0	200.1	165.4			

Depth to Bottom	295.44	(In) (Minus)	Depth to Water	150.12	(In)	=	145.32	HT (in)
Depth to Bottom	24.62	(Ft) (Minus)	Depth to Water	12.51	(Ft)	=	12.11	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together
d/2 = 1

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	456	.0043	2.0		~~5.01~~	6
Middle					3.14		.0043			5.9	
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098
PROJECT NAME: BM 820
WELL NO. MW15
SAMPLE NO.UST820- MW15

PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt	DATE 4-13-04
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt	TIME 1040
PHONE: 910-451-2390	WEATHER: cloudy	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	8.19	7.00	6.43	5.93			(STD)
Specific Conductivity	.128	.116	.113	.000			(m S/cm°)
Turbidity (Turb)	314	1263	44.6	2.4			(NTU)
Dissolved Oxygen (DO)	1.84	2.32	2.72	2.74			(g/l)
Temperature (Temp)	18.36	18.39	18.48	19.92			(°C)
ORP	-12.5	46.5	69.7	128.7			

Depth to Bottom	253.48	(In) (Minus)	Depth to Water	70.48	(In)	=	195.00	HT (in)
Depth to Bottom	24.04	(Ft) (Minus)	Depth to Water	7.54	(Ft)	=	16.50	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together
d/2 = 1

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	6.22	.0043	2.7		1.92	8
Middle					3.14		.0043			8.0	
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098	
PROJECT NAME: BM 820	
WELL NO. MW16	
SAMPLE NO.UST820- MW16	
PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt
PHONE: 910-451-2390	WEATHER: sunny 55°
LEL:	
PID:	Sampling Device: Bailer

DATE 4/15/04
TIME 1100
Well Locked: [X] Yes
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	3.09	4.82	4.87	4.87			(STD)
Specific Conductivity	2.221	.171	.168	.165			(m S/cm°)
Turbidity (Turb)		PROBE NOT WORKING					(NTU)
Dissolved Oxygen (DO)	2.15	-2.74	-3.00	-2.91			(g/l)
Temperature (Temp)	17.33	17.47	17.65	17.93			(°C)
ORP	439.4	236.6	214.0	203.5			

Depth to Bottom	339.60	(In) (Minus)	Depth to Water	111.84	(In)	=	227.76	HT (in)
Depth to Bottom	28.30	(Ft) (Minus)	Depth to Water	9.32	(Ft)	=	18.98	HT (ft)

d = 2
r = 1
d/2 = 1

MEASUREMENTS (IN INCHES)
Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	715	.0043	3.1		9.2	10
Middle					3.14		.0043			9.2	
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐

Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098
PROJECT NAME: BM 820
WELL NO. MW26
SAMPLE NO.UST820- MW26 + MW26D

PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt	DATE 4.20.07
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt	TIME 0940 / 0945
PHONE: 910-451-2390	WEATHER: Sunny · 60°	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	4.66	4.84	4.49	4.59			(STD)
Specific Conductivity	.093	.073	.072	.074			(m S/cm°)
Turbidity (Turb)	——	PROBE NOT WORKING		——			(NTU)
Dissolved Oxygen (DO)	7.15	-2.28	-3.24	-3.29			(g/l)
Temperature (Temp)	17.15	17.05	17.29	17.55			(°C)
ORP	264.9	47.6	77.0	57.5			

Depth to Bottom	245.20	(In) (Minus)	Depth to Water	124.09	(In)	=	171.12	HT (in)
Depth to Bottom	24.60	(Ft) (Minus)	Depth to Water	10.34	(Ft)	=	14.26	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together
d/2 = 1

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	537	.0043	2.3		6.9	7
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS: DUPLICATE SAMPLE TAKEN

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 844098
PROJECT NAME: BM 820
WELL NO. MW27
SAMPLE NO.UST820- MW27

PROJECT LOCATION: Camp Lejeune	LOGGER: Debra Hoyt	DATE 4.13.04
PROJECT CONTACT: Mark Martin	SAMPLER: Debra Hoyt	TIME 1500
PHONE: 910-451-2390	WEATHER: RAIN	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH							(STD)
Specific Conductivity							(m S/cm°)
Turbidity (Turb)							(NTU)
Dissolved Oxygen (DO)							(g/l)
Temperature (Temp)							(°C)
ORP							

Depth to Bottom	172.80	(In) (Minus)	Depth to Water	98.52	(In)	=	74.28	HT (in)
Depth to Bottom	14.40	(Ft) (Minus)	Depth to Water	8.21	(Ft)	=	6.19	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP				1	3.14	233	.0043	1.0		2.97	3
Middle					3.14		.0043			3.0	
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS: NO FIELD MEASUREMENTS TAKEN. HAND BAILED WELL

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: BM 820
WELL NO. MW-2
SAMPLE NO.UST820- MW02

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11/3/04
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1200
PHONE: 910-451-2390	WEATHER: Cloudy 60's	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	6.87	5.99	6.01	6.07			(STD)
Specific Conductivity	0.119	0.132	0.213	0.247			(m S/cm°)
Turbidity (Turb.)	62.2	37.8	6.0	2.6			(NTU)
Dissolved Oxygen (DO)	4.21	2.04	1.12	0.92			(g/l)
Temperature (Temp)	24.65	24.89	24.95	24.56			(°C)
ORP	11.8	54.5	42.8	35.0			

Depth to Bottom	270.12	(In) (Minus)	Depth to Water	152.76	(In)	=	117.36	HT (in)
Depth to Bottom	22.51	(Ft) (Minus)	Depth to Water	12.73	(Ft)	=	9.78	HT (ft)

d = 2
r = 1
d/2 = 1

MEASUREMENTS (IN INCHES)
Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			117.36	1	3.14	~~369~~	.0043	6.3		19.8	20
Middle					3.14	1474	.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: BM 820
WELL NO. MW-3
SAMPLE NO.UST820- MW03

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11/3/04
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1330
PHONE: 910-451-2390	WEATHER: Cloudy 60-70'	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	4.08	5.31	6.15	6.39			(STD)
Specific Conductivity	1.286	0.502	0.407	0.431			(mS/cm°)
Turbidity (Turb.)	126.4	160.1	14.3	6.7			(NTU)
Dissolved Oxygen (DO)	6.59	5.21	5.85	4.87			(g/l)
Temperature (Temp)	24.77	24.72	24.89	24.91			(°C)
ORP	295.6	238.3	191.7	187.6			

Depth to Bottom	272.28	(In) (Minus)	Depth to Water	152.16	(In)	=	260.28	HT (in)
Depth to Bottom	22.69	(Ft) (Minus)	Depth to Water	12.68	(Ft)	=	10.01	HT (ft)

d = 2
r = 1
d/2 = 1

MEASUREMENTS (IN INCHES)
Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			260.28	1	3.14	1509	.0043	6.5		19.5	20
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385	
PROJECT NAME: BM 820	
WELL NO. MW-4	
SAMPLE NO.UST820- MW04	
PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin
PHONE: 910-451-2390	WEATHER: CLEAR 50'S
LEL:	
PID:	Sampling Device: Bailer

DATE 11/6/04
TIME 1100
Well Locked: [X] Yes ☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	5.50	4.44	4.42	4.42			(STD)
Specific Conductivity	0.122	0.130	0.134	0.139			(m S/cm°)
Turbidity (Turb.)	0.0	0.0	0.0	0.0			(NTU)
Dissolved Oxygen (DO)	7.05	3.65	3.00	2.35			(g/l)
Temperature (Temp)	23.72	25.11	25.24	25.35			(°C)
ORP	324.4	342.2	335.4	326.5			

Depth to Bottom	267.00	(In) (Minus)	Depth to Water	158.28	(In)	=	108.72	HT (in)
Depth to Bottom	22.25	(Ft) (Minus)	Depth to Water	~~13.19~~ 13.19	(Ft)	=	9.06	HT (ft)

d = 24
r = 2
d/2 = 2

MEASUREMENTS (IN INCHES)
Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			108.72	2	3.14	1366	.0043	5.9		17.6	20
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: BM 820
WELL NO. MW-5
SAMPLE NO.UST820-MW05

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11/22/04
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1000
PHONE: 910-451-2390	WEATHER: Cloudy 60-70	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH							(STD)
Specific Conductivity							(mS/cm°)
Turbidity (Turb.)							(NTU)
Dissolved Oxygen (DO)							(g/l)
Temperature (Temp)							(°C)
ORP							

Depth to Bottom	164.52	(In) (Minus)	Depth to Water	127.20	(In)	=	37.32	HT (in)
Depth to Bottom	13.71	(Ft) (Minus)	Depth to Water	10.60	(Ft)	=	3.11	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			37.32	1	3.14	117	.0043	0.5		1.5	0.5
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS: Low Yeild Well could not purge enought wate to get Field Readings

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: BM 820
WELL NO. MW-6
SAMPLE NO.UST820- MW06

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11/6/09
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1200
PHONE: 910-451-2390	WEATHER: Clear 50' (Hi)	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	6.07	6.42	6.57				(STD)
Specific Conductivity	0.422	0.312	0.409				(mS/cm°)
Turbidity (Turb.)	500.8	566.0	206.8				(NTU)
Dissolved Oxygen (DO)	5.48	4.33	2.78				(g/l)
Temperature (Temp)	21.08	21.20	21.67				(°C)
ORP	257.8	208.4	52.4				

Depth to Bottom	339.48	(In) (Minus)	Depth to Water	151.32	(In)	=	188.16	HT (in)
Depth to Bottom	28.29	(Ft) (Minus)	Depth to Water	12.61	(Ft)	=	15.68	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1
Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS	Purge Vol.	Vol. Purged
TOP			188.16	1	3.14	591	.0043	2.5	7.6	60
Middle					3.14		.0043			
Bottom					3.14		.0043			
Total					3.14		.0043			

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS: Purged Dry 3 x Vol.

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: [redacted] BM820
WELL NO. MW-7
SAMPLE NO.UST [redacted] 820-MW7

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11-20-04
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1430
PHONE: 910-451-2390	WEATHER: Partly Cloudy 70°s	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	5.13	5.29	5.28	5.17			(STD)
Specific Conductivity	0.092	0.087	0.082	0.075			(m S/m)
Turbidity (Turb)	1297.0	675.3	419.7	283.3			(NTU)
Dissolved Oxygen (DO)	3.70	.95	.74	.76			(g/l)
Temperature (Temp)	20.76	20.79	20.70	20.67			(°C)
ORP	254.0	235.6	229.9	242.3			

Depth to Bottom	285.60	(In) (Minus)	Depth to Water	142.20	(In)	=	143.40	HT (in)
Depth to Bottom	23.80	(Ft) (Minus)	Depth to Water	11.85	(Ft)	=	11.95	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			143.4	1	3.14	450	.0043	1.9		5.8	10
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: [redacted] BM 820
WELL NO. MW 8
SAMPLE NO.UST [redacted] 820-MW-8

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11-20-04
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1500
PHONE: 910-451-2390	WEATHER: Partly Cloudy 70's	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	3.16	3.02	2.98	2.95			(STD)
Specific Conductivity	0.791	0.907	0.937	0.972			(m S/m)
Turbidity (Turb)	80.3	56.3	42.6	29.3			(NTU)
Dissolved Oxygen (DO)	3.82	2.07	1.69	1.51			(g/l)
Temperature (Temp)	20.35	20.14	20.22	20.50			(°C)
ORP	514.5	537.6	549.6	550.4			

Depth to Bottom	590.40	(In) (Minus)	Depth to Water	155.76	(In)	=	434.64	HT (in)
Depth to Bottom	49.20	(Ft) (Minus)	Depth to Water	12.58	(Ft)	=	36.22	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			434.64	1	3.14	1365	.0043	5.9		17.6	20
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385	
PROJECT NAME: BM 820	
WELL NO. MW-9	
SAMPLE NO.UST820- MW09	
PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin
PHONE: 910-451-2390	WEATHER: Cloudy 60-70
LEL:	
PID:	Sampling Device: Bailer

DATE 11/3/04
TIME 1245
Well Locked: [X] Yes
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	2.95	2.89	2.91	2.94			(STD)
Specific Conductivity	6.760	7.985	8.007	7.930			(mS/cm°)
Turbidity (Turb.)	46.4	203.7	187.4	188.4			(NTU)
Dissolved Oxygen (DO)	5.15	1.97	1.32	1.20			(g/l)
Temperature (Temp)	24.72	24.72	24.79	24.78			(°C)
ORP	281.6	275.9	275.5	274.5			

Depth to Bottom	616.68	(In) (Minus)	Depth to Water	201.12	(In)	=	415.56	HT (in)
Depth to Bottom	51.39	(Ft) (Minus)	Depth to Water	16.76	(Ft)	=	34.63	HT (ft)

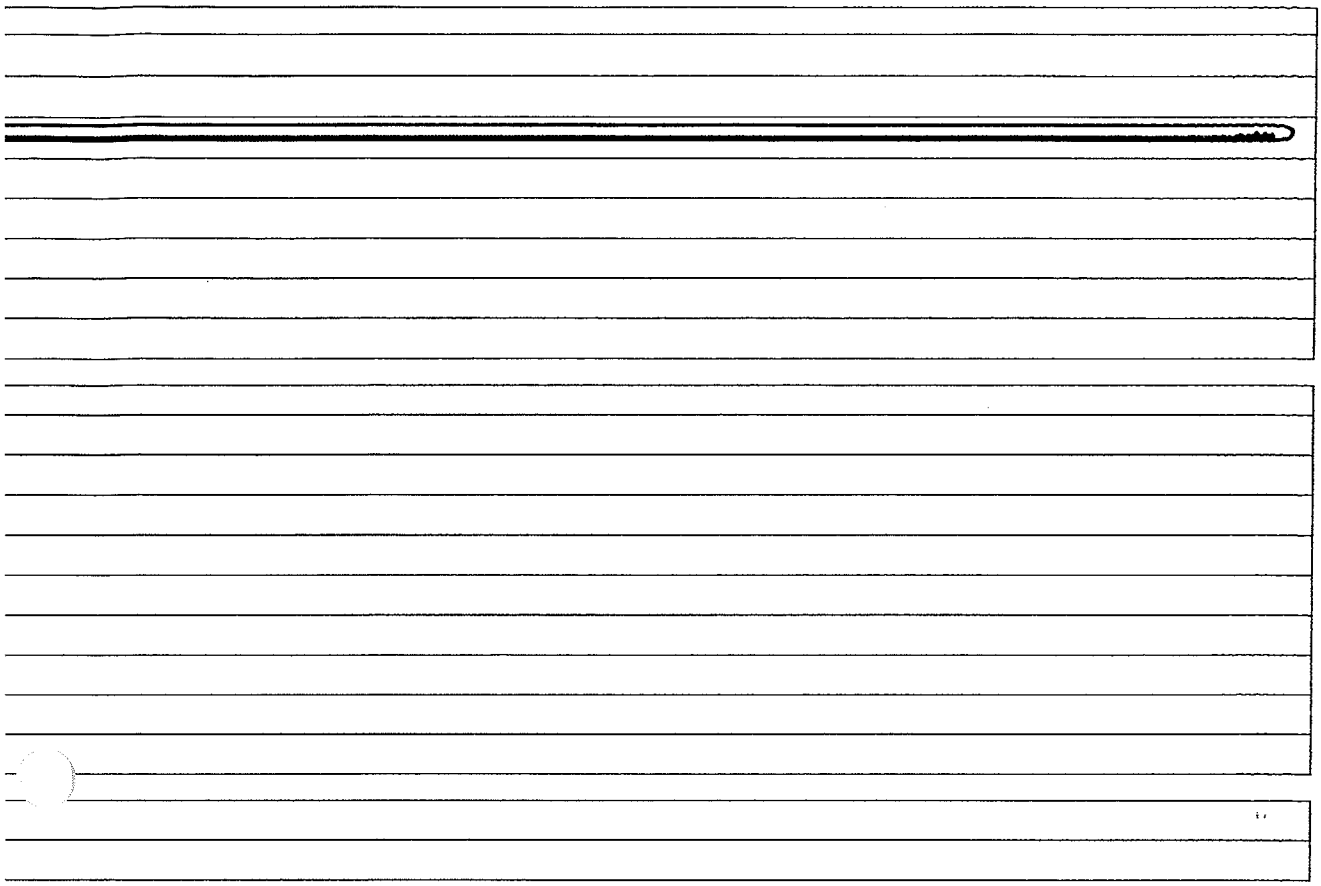
d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together
d/2 = 1

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS	Purge Vol.	Vol. Purged
TOP			415.56	1	3.14	1305	.0043	5.6	16.8	20
Middle					3.14		.0043			
Bottom					3.14		.0043			
Total					3.14		.0043			

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS: Bubbles in purge water.

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐



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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: BM 820
WELL NO. MW-11
SAMPLE NO.UST820- MW11

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11/22/07
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1130
PHONE: 910-451-2390	WEATHER: PC. 60'S.	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	6.83	5.63	5.37	5.26			(STD)
Specific Conductivity	0.260	0.245	0.225	0.213			(mS/cm°)
Turbidity (Turb.)	61.1	14.4	3.2	2.3			(NTU)
Dissolved Oxygen (DO)	2.57	0.79	0.43	0.38			(g/l)
Temperature (Temp)	25.40	26.55	26.85	26.92			(°C)
ORP	92.6	28.7	-25.1	-40.9			

Depth to Bottom	279.72	(In) (Minus)	Depth to Water	118.92	(In)	=	160.80	HT (in)
Depth to Bottom	23.31	(Ft) (Minus)	Depth to Water	9.91	(Ft)	=	13.4	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS	Purge Vol.	Vol. Purged
TOP			160.8	1	3.14	505	.0043	2.2	6.5	10
Middle					3.14		.0043			
Bottom					3.14		.0043			
Total					3.14		.0043			

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: BM 820
WELL NO. MW 12
SAMPLE NO.UST820-MW12

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11/6/04
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1300
PHONE: 910-451-2390	WEATHER: Clear 50's	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	6.53	4.75	4.59	4.42			(STD)
Specific Conductivity	0.079	0.081	0.083	0.086			(mS/cm°)
Turbidity (Turb.)	157.6	271.5	162.4	70.8			(NTU)
Dissolved Oxygen (DO)	6.79	4.04	4.15	4.56			(g/l)
Temperature (Temp)	21.83	22.41	22.52	22.60			(°C)
ORP	137.2	195.0	203.6	236.9			

Depth to Bottom	305.28	(In) (Minus)	Depth to Water	148.68	(In)	=	156.60	HT (in)
Depth to Bottom	25.44	(Ft) (Minus)	Depth to Water	12.39	(Ft)	=	13.05	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			156.6	1	3.14	492	.0043	2.1		6.3	10
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385	
PROJECT NAME: BM 820	
WELL NO. MW-13	
SAMPLE NO.UST820- MW13	
PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin
PHONE: 910-451-2390	WEATHER: clear 60's
LEL:	
PID:	Sampling Device: Bailer

DATE 11/6/09
TIME 1400
Well Locked: [X] Yes ☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	5.78	6.17	6.19	6.20			(STD)
Specific Conductivity	0.166	0.119	0.111	0.103			(mS/cm°)
Turbidity (Turb.)	375.3	48.5	23.0	8.7			(NTU)
Dissolved Oxygen (DO)	6.88	8.67	8.89	9.13			(g/l)
Temperature (Temp)	21.41	22.09	22.20	22.34			(°C)
ORP	222.8	209.2	213.3	217.8			

Depth to Bottom	277.20	(In) (Minus)	Depth to Water	126.48	(In)	=	150.72	HT (in)
Depth to Bottom	23.10	(Ft) (Minus)	Depth to Water	10.54	(Ft)	=	12.56	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together
d/2 = 1

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			150.72	1	3.14	473	.0043	2.0		6.1	8.
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: BM 820
WELL NO. MW 14
SAMPLE NO.UST820- MW14

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11-20-04
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1330
PHONE: 910-451-2390	WEATHER: Partly Cloudy 70's	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	5.15	5.24	5.26	5.23			(STD)
Specific Conductivity	0.082	0.071	0.065	0.058			(mS/cm)
Turbidity (Turb.)	269.4	128.8	103.7	50.4			(NTU)
Dissolved Oxygen (DO)	3.30	.65	.30	.15			(g/l)
Temperature (Temp)	20.58	20.73	20.85	20.92			(°C)
ORP	138.6	47.6	24.3	3.4			

Depth to Bottom	295.44	(In) (Minus)	Depth to Water	171.12	(In)	=	124.32	HT (in)
Depth to Bottom	24.62	(Ft) (Minus)	Depth to Water	14.26	(Ft)	=	10.36	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			124.32	1	3.14	390	.0043	1.7		5.0	7
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385	
PROJECT NAME: BM 820	
WELL NO. MW-15	
SAMPLE NO.UST820- MW15	
PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin
PHONE: 910-451-2390	WEATHER: Clear 40-50
LEL:	Well Locked: [X] Yes
PID:	Sampling Device: Bailer

DATE 11/6/04
TIME 1000
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	6.95	6.16	5.96	5.70			(STD)
Specific Conductivity	0.245	0.179	0.169	0.143			(m S/cm°)
Turbidity (Turb.)	764.8	153.2	53.6	16.7			(NTU)
Dissolved Oxygen (DO)	7.56	3.68	2.94	2.79			(g/l)
Temperature (Temp)	20.84	22.72	23.16	23.39			(°C)
ORP	256.4	276.2	271.7	270.4			

Depth to Bottom	288.00	(In) (Minus)	Depth to Water	110.52	(In)	=	177.48	HT (in)
Depth to Bottom	24.00	(Ft) (Minus)	Depth to Water	9.21	(Ft)	=	14.79	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			177.48	1	3.14	557	.0043	2.4		7.2	10
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385	
PROJECT NAME: BM 820	
WELL NO. MW-16	
SAMPLE NO.UST820- MW16	
PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin
PHONE: 910-451-2390	WEATHER: Partly Cloudy 70's
LEL:	
PID:	Sampling Device: Bailer

DATE 11-20-04
TIME 1300
Well Locked: [X] Yes
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	3.00	3.73	4.33	4.66			(STD)
Specific Conductivity	0.945	0.356	0.183	0.162			(mS/cm°)
Turbidity (Turb.)	296.0	201.1	49.6	1.2			(NTU)
Dissolved Oxygen (DO)	2.66	1.63	1.77	.54			(g/l)
Temperature (Temp)	22.21	22.28	22.37	22.41			(°C)
ORP	442.4	399.1	291.2	184.6			

Depth to Bottom	339.60	(In) (Minus)	Depth to Water	132.72	(In)	=	206.88	HT (in)
Depth to Bottom	28.30	(Ft) (Minus)	Depth to Water	11.06	(Ft)	=	17.24	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1
d/2 = 1

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			206.88	1	3.14	650	.0043	2.8		8.4	10
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

Multiply Together

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

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WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385	
PROJECT NAME: BM 820	
WELL NO. MW 17	
SAMPLE NO.UST820- MW17	
PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin
PHONE: 910-451-2390	WEATHER: Partly Cloudy 70's
LEL:	
PID:	Sampling Device: Bailer

DATE 11/20/04
TIME 1230
Well Locked: [X] Yes ☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	2.49	2.42	2.41	2.42			(STD)
Specific Conductivity	9.031	9.692	9.759	9.517			(mS/cm°)
Turbidity (Turb.)	103.0	18.9	7.7	5.1			(NTU)
Dissolved Oxygen (DO)	2.89	0.36	0.19	0.18			(g/l)
Temperature (Temp)	22.76	23.33	23.63	23.70			(°C)
ORP	448.3	456.6	450.2	447.3			

Depth to Bottom	619.20	(In) (Minus)	Depth to Water	235.32	(In)	=	383.88	HT (in)
Depth to Bottom	51.60	(Ft) (Minus)	Depth to Water	19.61	(Ft)	=	31.99	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together
d/2 = 1

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			383.88	1	3.14	1205	.0043	5.2		15.5	20
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS: Purge Water Looks like weak TCM. AIR IN Purge water

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: BM 820
WELL NO. MW-18
SAMPLE NO.UST820- MW18

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11/20/09
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1050
PHONE: 910-451-2390	WEATHER:	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	3.51	3.98	4.24	4.30			(STD)
Specific Conductivity	3.276	0.611	0.300	0.306			(mS/cm)
Turbidity (Turb.)	1305.6	1303.0	1222.3	655.0			(NTU)
Dissolved Oxygen (DO)	2.37	0.50	0.34	0.33			(g/l)
Temperature (Temp)	21.68	21.40	21.40	21.40			(°C)
ORP	280.0	202.0	63.2	-17.5			

Depth to Bottom	300.00	(In) (Minus)	Depth to Water	133.92	(In)	=	166.08	HT (in)
Depth to Bottom	25.00	(Ft) (Minus)	Depth to Water	11.16	(Ft)	=	13.84	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS	Purge Vol.	Vol. Purged
TOP			166.08	1	3.14	521	.0043	2.2	6.7	10
Middle					3.14		.0043			
Bottom					3.14		.0043			
Total					3.14		.0043			

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385	
PROJECT NAME: BM 820	
WELL NO. MW19	
SAMPLE NO.UST820-MW19	
PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin
PHONE: 910-451-2390	WEATHER: Cloudy 70°
LEL:	
PID:	Sampling Device: Bailer

DATE 1120
TIME 1000
Well Locked: [X] Yes
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	3.27	3.16	3.17	3.17			(STD)
Specific Conductivity	16.26	16.17	16.25	16.31			(mS/cm°)
Turbidity (Turb.)	127.1	56.8	84.1	85.3			(NTU)
Dissolved Oxygen (DO)	3.02	0.37	0.48	0.72			(g/l)
Temperature (Temp)	21.89	22.07	22.55	22.89			(°C)
ORP	276.0	283.1	282.4	293.0			

Depth to Bottom	619.20	(In) (Minus)	Depth to Water	228.48	(In)	=	350.72	HT (in)
Depth to Bottom	51.60	(Ft) (Minus)	Depth to Water	19.04	(Ft)	=	32.56	HT (ft)

d = 2
r = 1
d/2 = 1

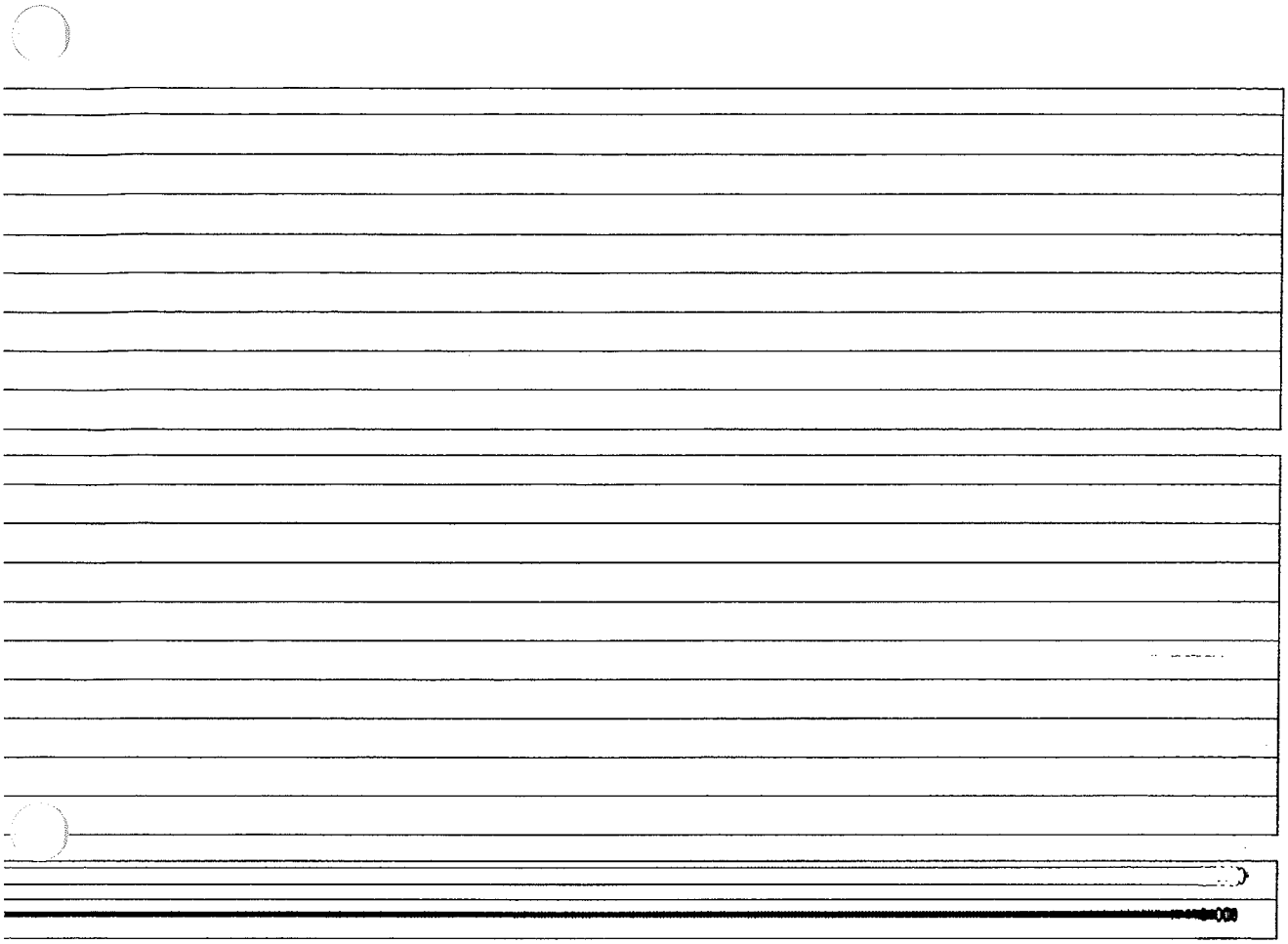
MEASUREMENTS (IN INCHES)
Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS	Purge Vol.	Vol. Purged
TOP			350.72	1	3.14	1227	.0043	5.3	15.8	20
Middle					3.14		.0043			
Bottom					3.14		.0043			
Total					3.14		.0043			

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			



Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: BM 820
WELL NO. MW21
SAMPLE NO.UST820- MW21

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11/20/04
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1130
PHONE: 910-451-2390	WEATHER: Cloudy 50.	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	3.36	3.27	3.23	3.20			(STD)
Specific Conductivity	1.250	1.185	1.399	1.670			(mS/cm°)
Turbidity (Turb.)	273.6	45.5	1.4	1.7			(NTU)
Dissolved Oxygen (DO)	1.93	0.37	0.19	0.16			(g/l)
Temperature (Temp)	19.48	19.66	20.19	20.23			(°C)
ORP	342.5	351.3	334.3	321.4			

Depth to Bottom	261.60	(In) (Minus)	Depth to Water	220.80	(In)	=	400.80	HT (in)
Depth to Bottom	51.80	(Ft) (Minus)	Depth to Water	18.40	(Ft)	=	33.40	HT (ft)

d = 2
r = 1
d/2 = 1

MEASUREMENTS (IN INCHES)
Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			400.8	1	3.14	1259	.0043	5.41		16.2	20
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐

27
0/07
0
Yes
No

D)
m°)
U)
)
)

T (in)
T (ft)

Vol. Purged
5

E

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385	
PROJECT NAME: BM 820	
WELL NO. MW23	
SAMPLE NO.UST820-MW23	
PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin
PHONE: 910-451-2390	WEATHER: clear 50's
LEL:	Well Locked: [X] Yes
PID:	Sampling Device: Bailer

DATE 11/30/04
TIME 1130
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	3.45	3.36	3.70	3.76			(STD)
Specific Conductivity	0.398	0.408	0.437	0.445			(mS/cm)
Turbidity (Turb.)	62.8	15.7	5.5	6.6			(NTU)
Dissolved Oxygen (DO)	4.97	4.49	1.32	1.38			(g/l)
Temperature (Temp)	18.57	19.00	19.02	19.17			(°C)
ORP	339.4	360.0	308.3	301.7			

Depth to Bottom	616.44	(In) (Minus)	Depth to Water	196.44	(In)	=	420	HT (in)
Depth to Bottom	51.37	(Ft) (Minus)	Depth to Water	16.37	(Ft)	=	35.0	HT (ft)

d = 2
r = 1
d/2 = 1

MEASUREMENTS (IN INCHES)
Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			420	1	3.14	1319	.0043	5.7		17.0	20
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]

OTHER: ☐

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385	
PROJECT NAME: BM 820	
WELL NO. MW24	
SAMPLE NO.UST820-MW24	
PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin
PHONE: 910-451-2390	WEATHER:
LEL:	
PID:	Sampling Device: Bailer

DATE 11/30/09
TIME 1400
Well Locked: [X] Yes
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	4.98	4.61	4.48	4.41			(STD)
Specific Conductivity	0.327	0.116	0.119	0.121			(mS/cm°)
Turbidity (Turb.)	412.9	118.6	47.5	5.1			(NTU)
Dissolved Oxygen (DO)	1.24	0.98	2.87	1.13			(g/l)
Temperature (Temp)	20.31	20.14	20.09	20.12			(°C)
ORP	70.0	207.7	251.1	257.5			

Depth to Bottom	303.0	(In) (Minus)	Depth to Water	177.00	(In)	=	126.00	HT (in)
Depth to Bottom	25.25	(Ft) (Minus)	Depth to Water	14.75	(Ft)	=	10.50	HT (ft)

d = 2
r = 1
d/2 = 1

MEASUREMENTS (IN INCHES)
Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			126	1	3.14	396	.0043	1.7		5.1	6
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385	
PROJECT NAME: BM 820	
WELL NO. MW-25	
SAMPLE NO.UST820-MW25	
PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin
PHONE: 910-451-2390	WEATHER: 45. 50's
LEL:	
PID:	Sampling Device: Bailer

DATE 11/30/09
TIME 1315
Well Locked: [X] Yes
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	3.94	3.85	3.83	3.81			(STD)
Specific Conductivity	0.478	0.518	0.612	0.695			(mS/cm°)
Turbidity (Turb.)	173.6	21.8	3.5	0.9			(NTU)
Dissolved Oxygen (DO)	4.34	1.70	1.05	0.95			(g/l)
Temperature (Temp)	18.98	19.71	19.41	19.41			(°C)
ORP	294.8	289.4	284.6	285.9			

Depth to Bottom	597.36	(In) (Minus)	Depth to Water	168.24	(In)	=	429.12	HT (in)
Depth to Bottom	49.78	(Ft) (Minus)	Depth to Water	14.02	(Ft)	=	35.76	HT (ft)

d = 2
r = 1
d/2 = 1

MEASUREMENTS (IN INCHES)
Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			429.12	1	3.14	1347	.0043	5.8		17.4	20
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385	
PROJECT NAME: BM 820	
WELL NO. MW-26	
SAMPLE NO.UST820- MW 26	
PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin
PHONE: 910-451-2390	WEATHER: Partly Cloudy 70's
LEL:	
PID:	Sampling Device: Bailer

DATE 11-20-04
TIME 1400
Well Locked: [X] Yes
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	5.41	5.35	5.07	4.92			(STD)
Specific Conductivity	0.084	0.081	0.082	0.083			(m S/cm°)
Turbidity (Turb.)	842.0	552.1	444.8	268.5			(NTU)
Dissolved Oxygen (DO)	6.30	4.65	4.57	4.62			(g/l)
Temperature (Temp)	21.66	21.74	22.01	22.10			(°C)
ORP	132.8	167.7	222.2	281.6			

Depth to Bottom	295.20	(In) (Minus)	Depth to Water	144.72	(In)	=	150.48	HT (in)
Depth to Bottom	24.60	(Ft) (Minus)	Depth to Water	12.06	(Ft)	=	12.54	HT (ft)

d = 2
r = 1
d/2 = 1

MEASUREMENTS (IN INCHES)
Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS	Purge Vol.	Vol. Purged
TOP			150.48	1	3.14	473	.0043	2.0	6x1	7
Middle					3.14		.0043			
Bottom					3.14		.0043			
Total					3.14		.0043			

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: BM 820
WELL NO. MW27
SAMPLE NO.UST820- MW27

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11/22/04
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1215
PHONE: 910-451-2390	WEATHER:	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH							(STD)
Specific Conductivity							(m S/cm°)
Turbidity (Turb.)							(NTU)
Dissolved Oxygen (DO)							(g/l)
Temperature (Temp)							(°C)
ORP							

Depth to Bottom	169.44	(In) (Minus)	Depth to Water	126.60	(In)	=	42.84	HT (in)
Depth to Bottom	14.12	(Ft) (Minus)	Depth to Water	10.55	(Ft)	=	3.57	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1
d/2 = 1

Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	II	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			42.84	1	3.14	135	.0043	0.6		1.7	0.5
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS: NO Field Readings Taken Low Yield well Purges Dry

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385	
PROJECT NAME: BM 820	
WELL NO. PW-1	
SAMPLE NO.UST820- PW01	
PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin
PHONE: 910-451-2390	WEATHER:
LEL:	
PID:	Sampling Device: Bailer

DATE 11/22/07
TIME 1100
Well Locked: [X] Yes
☐ No

FIELD MEASUREMENTS

	1	2	3	4		
PH	7.23	6.98	6.79	6.81		(STD)
Specific Conductivity	0.198	0.197	0.230	0.258		(m S/cm°)
Turbidity (Turb.)	163.3	143.9	53.6	20.4		(NTU)
Dissolved Oxygen (DO)	7.35	7.32	7.89	8.14		(g/l)
Temperature (Temp)	22.01	22.38	22.46	22.52		(°C)
ORP	78.9	93.5	23.3	-20.3		

Depth to Bottom	405.72	(In) (Minus)	Depth to Water	168.24	(In)	=	237.48	HT (in)
Depth to Bottom	33.81	(Ft) (Minus)	Depth to Water	14.02	(Ft)	=	19.79	HT (ft)

d = 6
r = 3
d/2 = 3

MEASUREMENTS (IN INCHES)
Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS	Purge Vol.	Vol. Purged
TOP			237.48	3	3.14	6711	.0043	28.9	86.6	90
Middle					3.14		.0043			
Bottom					3.14		.0043			
Total					3.14		.0043			

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS: Bio Smas in well

PURGE DISCHARGED:	DRUM: ☐	DRUM#	SITE TREATMENT: [X]
OTHER: ☐			

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385	
PROJECT NAME: BM 820	
WELL NO. MW22	
SAMPLE NO.UST820- MW22	
PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin
PHONE: 910-451-2390	WEATHER: Sunny 50
LEL:	Well Locked: [X] Yes
PID:	Sampling Device: Bailer

DATE 11/30/09
TIME 1230
☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	4.25	4.59	4.64	4.64			(STD)
Specific Conductivity	0.134	0.082	0.077	0.072			(mS/cm°)
Turbidity (Turb.)	29.9	4.1	1.2	0.7			(NTU)
Dissolved Oxygen (DO)	2.92	0.50	0.36	0.27			(g/l)
Temperature (Temp)	18.69	19.32	19.35	19.34			(°C)
ORP	235.0	95.6	85.4	84.3			

Depth to Bottom	256.08	(In) (Minus)	Depth to Water	196.32	(In)	=	59.76	HT (in)
Depth to Bottom	21.34	(Ft) (Minus)	Depth to Water	16.36	(Ft)	=	4.98	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together

d/2 = 1	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			59.76	1	3.14	188	.0043	0.8		2.4	5
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]

OTHER: ☐

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: BM 820
WELL NO. MW20
SAMPLE NO.UST820-MW20

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11/20/04
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1200
PHONE: 910-451-2390	WEATHER: Partly Cloudy 70	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	3.74	4.37	4.42	4.44			(STD)
Specific Conductivity	0.431	0.108	0.087	0.084			(mS/cm°)
Turbidity (Turb.)	57.5	9.1	2.2	1.0			(NTU)
Dissolved Oxygen (DO)	4.78	4.23	4.11	4.09			(g/l)
Temperature (Temp)	20.14	20.45	20.48	20.52			(°C)
ORP	321.9	340.4	351.3	354.1			

Depth to Bottom	295.20	(In) (Minus)	Depth to Water	168.60	(In)	=	126.60	HT (in)
Depth to Bottom	24.60	(Ft) (Minus)	Depth to Water	14.05	(Ft)	=	10.55	HT (ft)

d = 2
r = 1
d/2 = 1

MEASUREMENTS (IN INCHES)
Multiply Together

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			126.6	1	3.14	398	.0043	1.7		5.1	7
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐

Shaw
Shaw Environmental & Infrastructure, Inc.

WELL OR GROUND WATER DATA SHEET

PROJECT NUMBER: 110385
PROJECT NAME: BM 820
WELL NO. MW 9D
SAMPLE NO.UST820-MW09D

PROJECT LOCATION: Camp Lejeune	LOGGER: Mark Martin	DATE 11/3/09
PROJECT CONTACT: Mark Martin	SAMPLER: Mark Martin	TIME 1115
PHONE: 910-451-2390	WEATHER: Cloudy 60's	
LEL:		Well Locked: [X] Yes
PID:	Sampling Device: Bailer	☐ No

FIELD MEASUREMENTS

	1	2	3	4			
PH	7.19	7.15	7.20	7.23			(STD)
Specific Conductivity	0.313	0.309	0.308	0.308			(mS/cm°)
Turbidity (Turb.)	26.4	3.8	2.5	1.7			(NTU)
Dissolved Oxygen (DO)	5.06	1.08	0.74	0.60			(g/l)
Temperature (Temp)	23.33	22.80	22.77	22.75			(°C)
ORP	257.5	249.6	75.2	-36.9			

Depth to Bottom	1209.96	(In) (Minus)	Depth to Water	210.84	(In)	=	999.12	HT (in)
Depth to Bottom	100.83	(Ft) (Minus)	Depth to Water	17.57	(Ft)	=	83.26	HT (ft)

d = 2 MEASUREMENTS (IN INCHES)
r = 1 Multiply Together
d/2 = 1

	BOTTOM	TOP	Layer Thickness	r^2	Π	Vol. Cubic in.	Conversion Factor	EST. GALLONS		Purge Vol.	Vol. Purged
TOP			999.12	1	3.14	3137	.0043	13.5		40.5	45
Middle					3.14		.0043				
Bottom					3.14		.0043				
Total					3.14		.0043				

ANALYTE	CONTAINER NUMBER	SIZE	PRESERVATIVE

COMMENTS:

PURGE DISCHARGED: DRUM: ☐ DRUM# SITE TREATMENT: [X]
OTHER: ☐

APPENDIX C

APRIL 2004 GROUNDWATER LABORATORY ANALYTICAL REPORTS

Southeast
ACCUTEST
Laboratories

04/27/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-BM 820

844098

Accutest Job Number: F23423

Sampling Date: 04/13/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 30

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sections: 1 2 3 4 5 6

Table of Contents

-1-

Section 1: Sample Summary 3
Section 2: Sample Results 4
2.1: F23423-1: UST820-MW15 4
2.2: F23423-2: UST820-MW05 7
2.3: F23423-3: UST820-MW27 10
2.4: F23423-4: UST820-TB-041304 13
Section 3: Misc. Forms 14
3.1: Chain of Custody 15
Section 4: GC Volatiles - QC Data Summaries 17
4.1: Method Blank Summary 18
4.2: Blank Spike Summary 19
4.3: Matrix Spike/Matrix Spike Duplicate Summary 20
Section 5: GC Semi-volatiles - QC Data Summaries 21
5.1: Method Blank Summary 22
5.2: Blank Spike Summary 24
5.3: Matrix Spike/Matrix Spike Duplicate Summary 25
Section 6: General Chemistry - QC Data Summaries 26
6.1: Method Blank and Spike Results Summary 27
6.2: Duplicate Results Summary 28
6.3: Matrix Spike Results Summary 29
6.4: Matrix Spike Duplicate Results Summary 30

Sample Summary

Shaw E & I, Inc.

Job No: F23423

Camp Lejeune-BM 820
Project No: 844098

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F23423-1	04/13/04	10:40	MM	04/14/04	AQ	Ground Water	UST820-MW15
F23423-2	04/13/04	13:45	MM	04/14/04	AQ	Ground Water	UST820-MW05
F23423-3	04/13/04	15:00	MM	04/14/04	AQ	Ground Water	UST820-MW27
F23423-4	04/13/04	00:00	MM	04/14/04	AQ	Trip Blank Water	UST820-TB-041304

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW15		
Lab Sample ID:	F23423-1	Date Sampled:	04/13/04
Matrix:	AQ - Ground Water	Date Received:	04/14/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF038074.D	1	04/26/04	CV	n/a	n/a	GEF3119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	89%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW15		
Lab Sample ID:	F23423-1	Date Sampled:	04/13/04
Matrix:	AQ - Ground Water	Date Received:	04/14/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19652.D	1	04/16/04	SM	04/15/04	OP10200	GIJ958
Run #2							

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.2	2.1	ug/l	
120-12-7	Anthracene	ND	5.2	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	2.1	ug/l	
86-73-7	Fluorene	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	ND	5.2	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.2	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	2.1	ug/l	
129-00-0	Pyrene	ND	5.2	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	99%		42-123%
84-15-1	o-Terphenyl	98%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW15		
Lab Sample ID:	F23423-1	Date Sampled:	04/13/04
Matrix:	AQ - Ground Water	Date Received:	04/14/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	19.0	5.0	mg/l	1	04/16/04	MCR	EPA 310.1
Sulfate	17.0	2.0	mg/l	1	04/16/04 14:36	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/16/04	MP	EPA 376.1
Total Organic Carbon	4.4	1.0	mg/l	1	04/16/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW05		
Lab Sample ID:	F23423-2	Date Sampled:	04/13/04
Matrix:	AQ - Ground Water	Date Received:	04/14/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF038075.D	1	04/26/04	CV	n/a	n/a	GEF3119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.62	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	1.5	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	3.4	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW05		
Lab Sample ID:	F23423-2	Date Sampled:	04/13/04
Matrix:	AQ - Ground Water	Date Received:	04/14/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19653.D	1	04/16/04	SM	04/15/04	OP10200	GIJ958
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.4	2.2	ug/l	
208-96-8	Acenaphthylene	ND	5.4	2.2	ug/l	
120-12-7	Anthracene	ND	5.4	2.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.4	2.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.4	2.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.4	2.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.4	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.4	2.2	ug/l	
218-01-9	Chrysene	ND	5.4	2.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.4	2.2	ug/l	
206-44-0	Fluoranthene	ND	5.4	2.2	ug/l	
86-73-7	Fluorene	ND	5.4	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.4	2.2	ug/l	
91-20-3	Naphthalene	ND	5.4	2.2	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.4	2.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.4	2.2	ug/l	
85-01-8	Phenanthrene	ND	5.4	2.2	ug/l	
129-00-0	Pyrene	ND	5.4	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	70%		42-123%
84-15-1	o-Terphenyl	86%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW05		
Lab Sample ID:	F23423-2	Date Sampled:	04/13/04
Matrix:	AQ - Ground Water	Date Received:	04/14/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	28.5	5.0	mg/l	1	04/22/04	MCR	EPA 310.1
Sulfate	3.6	2.0	mg/l	1	04/16/04 14:51	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/16/04	MP	EPA 376.1
Total Organic Carbon	2.0	1.0	mg/l	1	04/16/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW27		
Lab Sample ID:	F23423-3	Date Sampled:	04/13/04
Matrix:	AQ - Ground Water	Date Received:	04/14/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF038079.D	1	04/26/04	CV	n/a	n/a	GEF3119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.2	1.0	0.50	ug/l	
108-88-3	Toluene	0.65	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	3.3	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW27		
Lab Sample ID:	F23423-3	Date Sampled:	04/13/04
Matrix:	AQ - Ground Water	Date Received:	04/14/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ19655.D	1	04/16/04	SM	04/15/04	OP10200	GIJ958
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.5	2.2	ug/l	
208-96-8	Acenaphthylene	ND	5.5	2.2	ug/l	
120-12-7	Anthracene	ND	5.5	2.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.5	2.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.5	2.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.5	2.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.5	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.5	2.2	ug/l	
218-01-9	Chrysene	ND	5.5	2.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.5	2.2	ug/l	
206-44-0	Fluoranthene	ND	5.5	2.2	ug/l	
86-73-7	Fluorene	10	5.5	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.5	2.2	ug/l	
91-20-3	Naphthalene	ND	5.5	2.2	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.5	2.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.5	2.2	ug/l	
85-01-8	Phenanthrene	ND	5.5	2.2	ug/l	
129-00-0	Pyrene	ND	5.5	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	105%		42-123%
84-15-1	o-Terphenyl	110%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW27		
Lab Sample ID:	F23423-3	Date Sampled:	04/13/04
Matrix:	AQ - Ground Water	Date Received:	04/14/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/22/04	MCR	EPA 310.1
Sulfate	15.6	2.0	mg/l	1	04/16/04 15:05	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/16/04	MP	EPA 376.1
Total Organic Carbon	4.0	1.0	mg/l	1	04/16/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-TB-041304		
Lab Sample ID:	F23423-4	Date Sampled:	04/13/04
Matrix:	AQ - Trip Blank Water	Date Received:	04/14/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF038071.D	1	04/26/04	CV	n/a	n/a	GEF3119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	88%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

F23423

CHAIN-OF-CUSTODY RECORD

COC Number:
844098-820-041304

Shaw
Shaw Environmental & Infrastructure, Inc.

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390

Receiving LAB: Accutest

Project Name	Project Location		
CAMP LEJEUNE - BM 820	CAMP LEJEUNE, NC		
Project Number	**Contact**	**P.O. Number**	**Reviewed by**
844098	Mark Martin	3600	
Client Rep	**Project Manager**		
US NAVY - LANTDIV	Ron Kenyon		

Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	VOC 602	PAH 610	Alkalinity (310.1)	TOC BY 415.1	Sulfide (376.1)	Sulfate 375.4
1	UST820-MW15	4/13/04	10:40		X	UST820-MW15	10	X	X	X	X	X	X
2	UST820-MW05	4/13/04	13:45		X	UST820-MW05	10	X	X	X	X	X	X
3	UST820-MW27	4/13/04	15:00		X	UST820-MW27	10	X	X	X	X	X	X
4	UST820-TB-041304	4/13/04	—		X	UST820-TB-041304	2	X					
5													
6													
7													
8													
9													
10													
11													

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time
1	1 -- 4		FedEx 8436 4374 9508	4/13/04	16:00
2		FED EX	Jeff Mitchell	4/14/04	09:00
3					

Remarks
Please E-mail results to mark.martin@shawgrp.com

21 Day TAT

F23423: Chain of Custody
Page 1 of 2

ACCUTEST Laboratories

Southeast
ACCUTEST.
Laboratories

05/04/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-BM 820

844098

Accutest Job Number: F23436

Sampling Date: 04/14/04

Report to:

Shaw E & I, Inc.
5700 Thurston Ave. Suite 116-B
Virginia Beach, VA 23455
natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 39

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

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Sections: 1 2 3 4 5 6

Table of Contents

Section 1: Sample Summary 3
Section 2: Sample Results 4
2.1: F23436-1: UST820-MW02 4
2.2: F23436-2: UST820-MW09 7
2.3: F23436-3: UST820-MW09D 10
2.4: F23436-4: UST820-MW13 13
2.5: F23436-5: UST820-MW12 16
2.6: F23436-6: UST820-TB-041404 19
Section 3: Misc. Forms 20
3.1: Chain of Custody 21
Section 4: GC Volatiles - QC Data Summaries **23**
4.1: Method Blank Summary 24
4.2: Blank Spike Summary 26
4.3: Matrix Spike/Matrix Spike Duplicate Summary 28
Section 5: GC Semi-volatiles - QC Data Summaries 30
5.1: Method Blank Summary 31
5.2: Blank Spike Summary 33
5.3: Matrix Spike/Matrix Spike Duplicate Summary 34
Section 6: General Chemistry - QC Data Summaries 35
6.1: Method Blank and Spike Results Summary 36
6.2: Duplicate Results Summary 37
6.3: Matrix Spike Results Summary 38
6.4: Matrix Spike Duplicate Results Summary 39

Sample Summary

Shaw E & I, Inc.

Job No: F23436

Camp Lejeune-BM 820
Project No: 844098

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F23436-1	04/14/04	10:00	MM	04/15/04	AQ	Ground Water	UST820-MW02
F23436-2	04/14/04	10:40	MM	04/15/04	AQ	Ground Water	UST820-MW09
F23436-3	04/14/04	11:35	MM	04/15/04	AQ	Ground Water	UST820-MW09D
F23436-4	04/14/04	14:10	MM	04/15/04	AQ	Ground Water	UST820-MW13
F23436-5	04/14/04	15:45	MM	04/15/04	AQ	Ground Water	UST820-MW12
F23436-6	04/14/04	00:00	MM	04/15/04	AQ	Trip Blank Water	UST820-TB-041404

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW02		
Lab Sample ID:	F23436-1	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF038090.D	1	04/26/04	CV	n/a	n/a	GEF3119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.83	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	1.7	1.0	0.50	ug/l	
108-88-3	Toluene	1.2	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	9.1	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW02		
Lab Sample ID:	F23436-1	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ19715.D	1	04/30/04	SM	04/21/04	OP10248	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.4	2.2	ug/l	
208-96-8	Acenaphthylene	ND	5.4	2.2	ug/l	
120-12-7	Anthracene	ND	5.4	2.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.4	2.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.4	2.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.4	2.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.4	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.4	2.2	ug/l	
218-01-9	Chrysene	ND	5.4	2.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.4	2.2	ug/l	
206-44-0	Fluoranthene	ND	5.4	2.2	ug/l	
86-73-7	Fluorene	ND	5.4	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.4	2.2	ug/l	
91-20-3	Naphthalene	3.4	5.4	2.2	ug/l	J
90-12-0	1-Methylnaphthalene	18.2	5.4	2.2	ug/l	
91-57-6	2-Methylnaphthalene	15.6	5.4	2.2	ug/l	
85-01-8	Phenanthrene	ND	5.4	2.2	ug/l	
129-00-0	Pyrene	ND	5.4	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	92%		42-123%
84-15-1	o-Terphenyl	104%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW02		
Lab Sample ID:	F23436-1	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	47.0	5.0	mg/l	1	04/26/04	MCR	EPA 310.1
Sulfate	41.5	2.0	mg/l	1	04/16/04 15:35	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/16/04	MP	EPA 376.1
Total Organic Carbon	3.5	1.0	mg/l	1	04/16/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW09		
Lab Sample ID:	F23436-2	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF038092.D	20	04/26/04	CV	n/a	n/a	GEF3119
Run #2 [a]	EF038123.D	100	04/27/04	CV	n/a	n/a	GEF3121

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1170 [b]	100	50	ug/l	
108-90-7	Chlorobenzene	ND	20	10	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	10	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	10	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	10	ug/l	
100-41-4	Ethylbenzene	225	20	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2620 [b]	100	50	ug/l	
108-88-3	Toluene	375	20	10	ug/l	
1330-20-7	Xylenes (total)	532	60	20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%	91%	70-123%
98-08-8	aaa-Trifluorotoluene	96%	97%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW09		
Lab Sample ID:	F23436-2	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ19716.D	1	04/30/04	SM	04/21/04	OP10248	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.4	2.2	ug/l	
208-96-8	Acenaphthylene	ND	5.4	2.2	ug/l	
120-12-7	Anthracene	ND	5.4	2.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.4	2.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.4	2.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.4	2.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.4	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.4	2.2	ug/l	
218-01-9	Chrysene	ND	5.4	2.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.4	2.2	ug/l	
206-44-0	Fluoranthene	ND	5.4	2.2	ug/l	
86-73-7	Fluorene	ND	5.4	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.4	2.2	ug/l	
91-20-3	Naphthalene	14.8	5.4	2.2	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.4	2.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.4	2.2	ug/l	
85-01-8	Phenanthrene	ND	5.4	2.2	ug/l	
129-00-0	Pyrene	ND	5.4	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	89%		42-123%
84-15-1	o-Terphenyl	81%		51-123%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW09		
Lab Sample ID:	F23436-2	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/26/04	MCR	EPA 310.1
Sulfate	12500	400	mg/l	200	04/16/04 20:30	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/16/04	MP	EPA 376.1
Total Organic Carbon	44.3	1.0	mg/l	1	04/16/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW09D		
Lab Sample ID:	F23436-3	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF038080.D	1	04/26/04	CV	n/a	n/a	GEF3119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	91%		70-123%
98-08-8	aaa-Trifluorotoluene	94%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW09D		
Lab Sample ID:	F23436-3	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19717.D	1	04/30/04	SM	04/21/04	OP10248	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.4	2.2	ug/l	
208-96-8	Acenaphthylene	ND	5.4	2.2	ug/l	
120-12-7	Anthracene	ND	5.4	2.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.4	2.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.4	2.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.4	2.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.4	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.4	2.2	ug/l	
218-01-9	Chrysene	ND	5.4	2.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.4	2.2	ug/l	
206-44-0	Fluoranthene	ND	5.4	2.2	ug/l	
86-73-7	Fluorene	ND	5.4	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.4	2.2	ug/l	
91-20-3	Naphthalene	ND	5.4	2.2	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.4	2.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.4	2.2	ug/l	
85-01-8	Phenanthrene	ND	5.4	2.2	ug/l	
129-00-0	Pyrene	ND	5.4	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	99%		42-123%
84-15-1	o-Terphenyl	96%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW09D		
Lab Sample ID:	F23436-3	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	148	5.0	mg/l	1	04/22/04	MCR	EPA 310.1
Sulfate	5.9	2.0	mg/l	1	04/16/04 16:18	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/16/04	MP	EPA 376.1
Total Organic Carbon	1.5	1.0	mg/l	1	04/16/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW13		
Lab Sample ID:	F23436-4	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF038124.D	10	04/27/04	CV	n/a	n/a	GEF3121
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	12.5	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
100-41-4	Ethylbenzene	145	10	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
108-88-3	Toluene	474	10	5.0	ug/l	
1330-20-7	Xylenes (total)	1290	30	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	101%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW13		
Lab Sample ID:	F23436-4	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ19718.D	1	04/30/04	SM	04/21/04	OP10248	GIJ962
Run #2 [a]	IJ19764.D	2	05/03/04	SM	04/21/04	OP10248	GIJ963

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2	960 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.2	2.1	ug/l	
120-12-7	Anthracene	ND	5.2	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	2.1	ug/l	
86-73-7	Fluorene	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	48.4 [b]	10	4.2	ug/l	
90-12-0	1-Methylnaphthalene	20.7	5.2	2.1	ug/l	
91-57-6	2-Methylnaphthalene	18.9	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	2.1	ug/l	
129-00-0	Pyrene	ND	5.2	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	93%	97%	42-123%
84-15-1	o-Terphenyl	90%	83%	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW13		
Lab Sample ID:	F23436-4	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	16.0	5.0	mg/l	1	04/22/04	MCR	EPA 310.1
Sulfate	20.5	2.0	mg/l	1	04/16/04 17:02	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/16/04	MP	EPA 376.1
Total Organic Carbon	7.4	1.0	mg/l	1	04/16/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW12		
Lab Sample ID:	F23436-5	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF038081.D	1	04/26/04	CV	n/a	n/a	GEF3119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	88%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW12		
Lab Sample ID:	F23436-5	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19719.D	1	04/30/04	SM	04/21/04	OP10248	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.2	2.1	ug/l	
120-12-7	Anthracene	ND	5.2	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	2.1	ug/l	
86-73-7	Fluorene	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	ND	5.2	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.2	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	2.1	ug/l	
129-00-0	Pyrene	ND	5.2	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	77%		42-123%
84-15-1	o-Terphenyl	91%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW12		
Lab Sample ID:	F23436-5	Date Sampled:	04/14/04
Matrix:	AQ - Ground Water	Date Received:	04/15/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/22/04	MCR	EPA 310.1
Sulfate	15.3	2.0	mg/l	1	04/16/04 18:16	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/16/04	MP	EPA 376.1
Total Organic Carbon	1.6	1.0	mg/l	1	04/16/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-TB-041404		
Lab Sample ID:	F23436-6	Date Sampled:	04/14/04
Matrix:	AQ - Trip Blank Water	Date Received:	04/15/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF038072.D	1	04/26/04	CV	n/a	n/a	GEF3119
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.70	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	87%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

F23436

COC Number:
844098-820-041404

Shaw
Shaw Environmental & Infrastructure, Inc.

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390 | Receiving LAB: Accutest

Project Name	Project Location		
CAMP LEJEUNE - BM 820	CAMP LEJEUNE, NC		
Project Number	**Contact**	**P.O. Number**	**Reviewed by**
844098	Mark Martin	3600	
Client Rep	**Project Manager**		
US NAVY - LANTDIV	Ron Kenyon		

Analysis Desired

Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	VOC 602	PAH 610	Alkalinity (310.1)	TOC BY 415.1	Sulfide (376.1)	Sulfate 375.4								
1	UST820-MW02	4/14/04	10:00		X	UST820-MW02	10	X	X	X	X	X	X								
2	UST820-MW09	4/14/04	10:40		X	UST820-MW09	10	X	X	X	X	X	X								
3	UST820-MW09D	4/14/04	11:35		X	UST820-MW09D	10	X	X	X	X	X	X								
4	UST820-MW13	4/14/04	14:10		X	UST820-MW13	10	X	X	X	X	X	X								
5	UST820-MW12	4/14/04	15:45		X	UST820-MW12	10	X	X	X	X	X	X								
6	UST820-TB-041404	4/14/04	—		X	UST820-TB-041404	2	X													
7																					
8																					
9																					
10																					

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time
1	KG		FedEx 8438 4375 0008	4/14/04	16:00
2	FED X		Carlos R	4/15/04	09:00
3					

Remarks
Please E-mail results to mark.martin@shawgrp.com

21 Day TAT

F23436: Chain of Custody
Page 1 of 2

ACCUTEST Laboratories

Southeast
ACCUTEST.
Laboratories

05/04/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-BM 820

844098

Accutest Job Number: F23478

Sampling Date: 04/15/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 36

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

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Sections: 1 2 3 4 5 6

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Sample Results 4
2.1: F23478-1: UST820-MW17 4
2.2: F23478-2: UST820-MW16 7
2.3: F23478-3: UST820-MW04 10
2.4: F23478-4: UST820-MW14 13
2.5: F23478-5: UST820-TB-041404 16
Section 3: Misc. Forms 17
3.1: Chain of Custody 18
Section 4: GC Volatiles - QC Data Summaries **20**
4.1: Method Blank Summary 21
4.2: Blank Spike Summary 23
4.3: Matrix Spike/Matrix Spike Duplicate Summary 25
Section 5: GC Semi-volatiles - QC Data Summaries 27
5.1: Method Blank Summary 28
5.2: Blank Spike Summary 30
5.3: Matrix Spike/Matrix Spike Duplicate Summary 31
Section 6: General Chemistry - QC Data Summaries 32
6.1: Method Blank and Spike Results Summary 33
6.2: Duplicate Results Summary 34
6.3: Matrix Spike Results Summary 35
6.4: Matrix Spike Duplicate Results Summary 36

Sample Summary

Shaw E & I, Inc.

Job No: F23478

Camp Lejeune-BM 820
Project No: 844098

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F23478-1	04/15/04	00:00	MM	04/16/04	AQ	Ground Water	UST820-MW17
F23478-2	04/15/04	00:00	MM	04/16/04	AQ	Ground Water	UST820-MW16
F23478-3	04/15/04	00:00	MM	04/16/04	AQ	Ground Water	UST820-MW04
F23478-4	04/15/04	00:00	MM	04/16/04	AQ	Ground Water	UST820-MW14
F23478-5	04/15/04	00:00	MM	04/16/04	AQ	Trip Blank Water	UST820-TB-041404

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW17		
Lab Sample ID:	F23478-1	Date Sampled:	04/15/04
Matrix:	AQ - Ground Water	Date Received:	04/16/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF038136.D	10	04/27/04	CV	n/a	n/a	GEF3121
Run #2 [a]	EF038211.D	20	04/29/04	CV	n/a	n/a	GEF3125

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	181	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
100-41-4	Ethylbenzene	ND	10	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1500 [b]	20	10	ug/l	
108-88-3	Toluene	ND	10	5.0	ug/l	
1330-20-7	Xylenes (total)	ND	30	10	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	85%	90%	70-123%
98-08-8	aaa-Trifluorotoluene	89%	96%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW17		
Lab Sample ID:	F23478-1	Date Sampled:	04/15/04
Matrix:	AQ - Ground Water	Date Received:	04/16/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19731.D	1	05/01/04	SM	04/21/04	OP10248	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.1	2.0	ug/l	
208-96-8	Acenaphthylene	ND	5.1	2.0	ug/l	
120-12-7	Anthracene	ND	5.1	2.0	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.1	2.0	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.1	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.1	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.1	2.0	ug/l	
218-01-9	Chrysene	ND	5.1	2.0	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.1	2.0	ug/l	
206-44-0	Fluoranthene	ND	5.1	2.0	ug/l	
86-73-7	Fluorene	ND	5.1	2.0	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.1	2.0	ug/l	
91-20-3	Naphthalene	ND	5.1	2.0	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.1	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.1	2.0	ug/l	
85-01-8	Phenanthrene	ND	5.1	2.0	ug/l	
129-00-0	Pyrene	ND	5.1	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	76%		42-123%
84-15-1	o-Terphenyl	96%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW17		
Lab Sample ID:	F23478-1	Date Sampled:	04/15/04
Matrix:	AQ - Ground Water	Date Received:	04/16/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/22/04	MCR	EPA 310.1
Sulfate	14200	400	mg/l	200	04/19/04 18:17	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/19/04	MP	EPA 376.1
Total Organic Carbon	25.4	1.0	mg/l	1	05/03/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW16		
Lab Sample ID:	F23478-2	Date Sampled:	04/15/04
Matrix:	AQ - Ground Water	Date Received:	04/16/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF038126.D	1	04/27/04	CV	n/a	n/a	GEF3121
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	2.4	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	86%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW16		
Lab Sample ID:	F23478-2	Date Sampled:	04/15/04
Matrix:	AQ - Ground Water	Date Received:	04/16/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19732.D	1	05/01/04	SM	04/21/04	OP10248	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.3	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.3	2.1	ug/l	
120-12-7	Anthracene	ND	5.3	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.3	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.3	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.3	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.3	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.3	2.1	ug/l	
218-01-9	Chrysene	ND	5.3	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.3	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.3	2.1	ug/l	
86-73-7	Fluorene	ND	5.3	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.3	2.1	ug/l	
91-20-3	Naphthalene	ND	5.3	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.3	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.3	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.3	2.1	ug/l	
129-00-0	Pyrene	ND	5.3	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	98%		42-123%
84-15-1	o-Terphenyl	93%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW16		
Lab Sample ID:	F23478-2	Date Sampled:	04/15/04
Matrix:	AQ - Ground Water	Date Received:	04/16/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/22/04	MCR	EPA 310.1
Sulfate	67.6	2.0	mg/l	1	04/19/04 14:57	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/19/04	MP	EPA 376.1
Total Organic Carbon	4.1	1.0	mg/l	1	05/03/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW04		
Lab Sample ID:	F23478-3	Date Sampled:	04/15/04
Matrix:	AQ - Ground Water	Date Received:	04/16/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF038127.D	1	04/27/04	CV	n/a	n/a	GEF3121
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	88%		70-123%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW04		
Lab Sample ID:	F23478-3	Date Sampled:	04/15/04
Matrix:	AQ - Ground Water	Date Received:	04/16/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19733.D	1	05/01/04	SM	04/21/04	OP10248	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.2	2.1	ug/l	
120-12-7	Anthracene	ND	5.2	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	2.1	ug/l	
86-73-7	Fluorene	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	ND	5.2	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.2	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	2.1	ug/l	
129-00-0	Pyrene	ND	5.2	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	64%		42-123%
84-15-1	o-Terphenyl	101%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW04		
Lab Sample ID:	F23478-3	Date Sampled:	04/15/04
Matrix:	AQ - Ground Water	Date Received:	04/16/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/22/04	MCR	EPA 310.1
Sulfate	42.1	2.0	mg/l	1	04/19/04 16:00	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/19/04	MP	EPA 376.1
Total Organic Carbon	2.9	1.0	mg/l	1	05/03/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW14		
Lab Sample ID:	F23478-4	Date Sampled:	04/15/04
Matrix:	AQ - Ground Water	Date Received:	04/16/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF038131.D	1	04/27/04	CV	n/a	n/a	GEF3121
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	87%		70-123%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW14		
Lab Sample ID:	F23478-4	Date Sampled:	04/15/04
Matrix:	AQ - Ground Water	Date Received:	04/16/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19735.D	1	05/01/04	SM	04/21/04	OP10248	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.2	2.1	ug/l	
120-12-7	Anthracene	ND	5.2	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	2.1	ug/l	
86-73-7	Fluorene	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	ND	5.2	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.2	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	2.1	ug/l	
129-00-0	Pyrene	ND	5.2	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	72%		42-123%
84-15-1	o-Terphenyl	96%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW14		
Lab Sample ID:	F23478-4	Date Sampled:	04/15/04
Matrix:	AQ - Ground Water	Date Received:	04/16/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	6.5	5.0	mg/l	1	04/22/04	MCR	EPA 310.1
Sulfate	13.6	2.0	mg/l	1	04/19/04 16:15	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/19/04	MP	EPA 376.1
Total Organic Carbon	5.4	1.0	mg/l	1	05/03/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-TB-041404		
Lab Sample ID:	F23478-5	Date Sampled:	04/15/04
Matrix:	AQ - Trip Blank Water	Date Received:	04/16/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF038125.D	1	04/27/04	CV	n/a	n/a	GEF3121
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.53	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	87%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

F23478

COC Number:
844098-820-041504

Shaw
Shaw Environmental & Infrastructure, Inc.

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390

Receiving LAB: Accutest

Project Name	Project Location
CAMP LEJEUNE - BM 820	CAMP LEJEUNE, NC

Project Number	Contact	P.O. Number	Reviewed by
844098	Mark Martin	3600	

Client Rep	Project Manager
US NAVY - LANTDIV	Ron Kenyon

Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	VOC 602	PAH 610	Alkalinity (310.1)	TOC BY 415.1	Sulfide (376.1)	Sulfate 375.4
1	UST820-MW17	4/15/04	0:00		X	UST820-MW17	10	X	X	X	X	X	X
2	UST820-MW16	4/15/04	0:00		X	UST820-MW16	10	X	X	X	X	X	X
3	UST820-MW04	4/15/04	0:00		X	UST820-MW04	10	X	X	X	X	X	X
4	UST820-MW14	4/15/04	0:00		X	UST820-MW14	10	X	X	X	X	X	X
5	UST820-TB-041404	4/15/04			X	UST820-TB-041404	2	X					
6													
7													
8													
9													
10													

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time
1	1 thru 5		FedEx 8436 4375 0019	4/15/04	16:00
2				04/16/04	0900
3					

Remarks
Please E-mail results to mark.martin@shawgrp.com

21 Day TAT

3.8°

F23478: Chain of Custody
Page 1 of 2

ACCUTEST Laboratories

Southeast
ACCUTEST
Laboratories

05/06/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-BM 820

844098

Accutest Job Number: F23496

Sampling Date: 04/16/04

Report to:

Shaw E & I, Inc.
5700 Thurston Ave. Suite 116-B
Virginia Beach, VA 23455
natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 35

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

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Sections: 1 2 3 4 5 6

Table of Contents

-1-

Section 1: Sample Summary **3**
Section 2: Sample Results 4
2.1: F23496-1: UST820-MW19 4
2.2: F23496-2: UST820-MW11 7
2.3: F23496-3: UST820-MW11D 10
2.4: F23496-4: UST820-MW21 13
Section 3: Misc. Forms 16
3.1: Chain of Custody 17
Section 4: GC Volatiles - QC Data Summaries **19**
4.1: Method Blank Summary 20
4.2: Blank Spike Summary 22
4.3: Matrix Spike/Matrix Spike Duplicate Summary 24
Section 5: GC Semi-volatiles - QC Data Summaries 26
5.1: Method Blank Summary 27
5.2: Blank Spike Summary 29
5.3: Matrix Spike/Matrix Spike Duplicate Summary 30
Section 6: General Chemistry - QC Data Summaries 31
6.1: Method Blank and Spike Results Summary 32
6.2: Duplicate Results Summary 33
6.3: Matrix Spike Results Summary 34
6.4: Matrix Spike Duplicate Results Summary 35

Sample Summary

Shaw E & I, Inc.

Job No: F23496

Camp Lejeune-BM 820
Project No: 844098

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F23496-1	04/16/04	14:00	MM	04/17/04	AQ	Ground Water	UST820-MW19
F23496-2	04/16/04	09:45	MM	04/17/04	AQ	Ground Water	UST820-MW11
F23496-3	04/16/04	09:50	MM	04/17/04	AQ	Ground Water	UST820-MW11D
F23496-4	04/16/04	15:00	MM	04/17/04	AQ	Ground Water	UST820-MW21

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW19		
Lab Sample ID:	F23496-1	Date Sampled:	04/16/04
Matrix:	AQ - Ground Water	Date Received:	04/17/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF038209.D	1	04/29/04	CV	n/a	n/a	GEF3125
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.79	1.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.5	1.0	0.50	ug/l	
108-88-3	Toluene	1.3	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.8	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	89%		70-123%
98-08-8	aaa-Trifluorotoluene	94%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW19		
Lab Sample ID:	F23496-1	Date Sampled:	04/16/04
Matrix:	AQ - Ground Water	Date Received:	04/17/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19738.D	1	05/01/04	SM	04/23/04	OP10269	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.3	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.3	2.1	ug/l	
120-12-7	Anthracene	ND	5.3	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.3	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.3	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.3	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.3	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.3	2.1	ug/l	
218-01-9	Chrysene	ND	5.3	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.3	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.3	2.1	ug/l	
86-73-7	Fluorene	ND	5.3	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.3	2.1	ug/l	
91-20-3	Naphthalene	ND	5.3	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.3	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.3	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.3	2.1	ug/l	
129-00-0	Pyrene	ND	5.3	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	81%		42-123%
84-15-1	o-Terphenyl	83%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW19		
Lab Sample ID:	F23496-1	Date Sampled:	04/16/04
Matrix:	AQ - Ground Water	Date Received:	04/17/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/23/04	SM	EPA 310.1
Sulfate	35700	1000	mg/l	500	04/22/04 00:47	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/19/04	MP	EPA 376.1
Total Organic Carbon	81.5	1.0	mg/l	1	05/04/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW11		
Lab Sample ID:	F23496-2	Date Sampled:	04/16/04
Matrix:	AQ - Ground Water	Date Received:	04/17/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF038132.D	20	04/27/04	CV	n/a	n/a	GEF3121
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	20	10	ug/l	
108-90-7	Chlorobenzene	ND	20	10	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	10	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	10	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	10	ug/l	
100-41-4	Ethylbenzene	31.6	20	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	20	10	ug/l	
108-88-3	Toluene	264	20	10	ug/l	
1330-20-7	Xylenes (total)	2180	60	20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%		70-123%
98-08-8	aaa-Trifluorotoluene	91%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW11		
Lab Sample ID:	F23496-2	Date Sampled:	04/16/04
Matrix:	AQ - Ground Water	Date Received:	04/17/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	IJ19739.D	1	05/01/04	SM	04/23/04	OP10269	GIJ962
Run #2 [a]	IJ19757.D	4	05/03/04	SM	04/23/04	OP10269	GIJ963

	Initial Volume	Final Volume
Run #1	890 ml	1.0 ml
Run #2	890 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.6	2.2	ug/l	
208-96-8	Acenaphthylene	ND	5.6	2.2	ug/l	
120-12-7	Anthracene	ND	5.6	2.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.6	2.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.6	2.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.6	2.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.6	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.6	2.2	ug/l	
218-01-9	Chrysene	ND	5.6	2.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.6	2.2	ug/l	
206-44-0	Fluoranthene	ND	5.6	2.2	ug/l	
86-73-7	Fluorene	ND	5.6	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.6	2.2	ug/l	
91-20-3	Naphthalene	92.3 [b]	22	9.0	ug/l	
90-12-0	1-Methylnaphthalene	49.1	5.6	2.2	ug/l	
91-57-6	2-Methylnaphthalene	50.7	5.6	2.2	ug/l	
85-01-8	Phenanthrene	ND	5.6	2.2	ug/l	
129-00-0	Pyrene	ND	5.6	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	122%	102%	42-123%
84-15-1	o-Terphenyl	91%	84%	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW11		
Lab Sample ID:	F23496-2	Date Sampled:	04/16/04
Matrix:	AQ - Ground Water	Date Received:	04/17/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/23/04	SM	EPA 310.1
Sulfate	43.1	2.0	mg/l	1	04/19/04 17:03	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/19/04	MP	EPA 376.1
Total Organic Carbon	5.8	1.0	mg/l	1	05/04/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW11D		
Lab Sample ID:	F23496-3	Date Sampled:	04/16/04
Matrix:	AQ - Ground Water	Date Received:	04/17/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF038133.D	10	04/27/04	CV	n/a	n/a	GEF3121
Run #2 [a]	EF038172.D	20	04/28/04	CV	n/a	n/a	GEF3121

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	10	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.0	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.0	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.0	ug/l	
100-41-4	Ethylbenzene	35.5	10	5.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	5.0	ug/l	
108-88-3	Toluene	299	10	5.0	ug/l	
1330-20-7	Xylenes (total)	2160 [b]	60	20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%	87%	70-123%
98-08-8	aaa-Trifluorotoluene	95%	89%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW11D		
Lab Sample ID:	F23496-3	Date Sampled:	04/16/04
Matrix:	AQ - Ground Water	Date Received:	04/17/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19740.D	1	05/01/04	SM	04/23/04	OP10269	GIJ962
Run #2 [a]	IJ19758.D	4	05/03/04	SM	04/23/04	OP10269	GIJ963

	Initial Volume	Final Volume
Run #1	970 ml	1.0 ml
Run #2	970 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.2	2.1	ug/l	
120-12-7	Anthracene	ND	5.2	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	2.1	ug/l	
86-73-7	Fluorene	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	92.7 [b]	21	8.2	ug/l	
90-12-0	1-Methylnaphthalene	40.2 [b]	21	8.2	ug/l	
91-57-6	2-Methylnaphthalene	47.1 [b]	21	8.2	ug/l	
85-01-8	Phenanthrene	ND	5.2	2.1	ug/l	
129-00-0	Pyrene	ND	5.2	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	107%	91%	42-123%
84-15-1	o-Terphenyl	99%	89%	51-123%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW11D		
Lab Sample ID:	F23496-3	Date Sampled:	04/16/04
Matrix:	AQ - Ground Water	Date Received:	04/17/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/23/04	SM	EPA 310.1
Sulfate	32.2	2.0	mg/l	1	04/19/04 17:18	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/19/04	MP	EPA 376.1
Total Organic Carbon	6.3	1.0	mg/l	1	05/04/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW21		
Lab Sample ID:	F23496-4	Date Sampled:	04/16/04
Matrix:	AQ - Ground Water	Date Received:	04/17/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF038210.D	1	04/29/04	CV	n/a	n/a	GEF3125
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.51	1.0	0.50	ug/l	J
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	88%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW21		
Lab Sample ID:	F23496-4	Date Sampled:	04/16/04
Matrix:	AQ - Ground Water	Date Received:	04/17/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19743.D	1	05/01/04	SM	04/23/04	OP10269	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.2	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.2	2.1	ug/l	
120-12-7	Anthracene	ND	5.2	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.2	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.2	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.2	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.2	2.1	ug/l	
218-01-9	Chrysene	ND	5.2	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.2	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.2	2.1	ug/l	
86-73-7	Fluorene	ND	5.2	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.2	2.1	ug/l	
91-20-3	Naphthalene	ND	5.2	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.2	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.2	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.2	2.1	ug/l	
129-00-0	Pyrene	ND	5.2	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	82%		42-123%
84-15-1	o-Terphenyl	93%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW21		
Lab Sample ID:	F23496-4	Date Sampled:	04/16/04
Matrix:	AQ - Ground Water	Date Received:	04/17/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/23/04	SM	EPA 310.1
Sulfate	1820	100	mg/l	50	04/19/04 19:17	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/19/04	MP	EPA 376.1
Total Organic Carbon	5.4	1.0	mg/l	1	05/04/04	LE	EPA 415.1

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

F23496

CHAIN-OF-CUSTODY RECORD

COC Number:
844098-820-041604

Shaw
Shaw Environmental & Infrastructure, Inc.

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390

Receiving LAB: Accutest

Project Name	Project Location		
CAMP LEJEUNE - BM 820	CAMP LEJEUNE, NC		
Project Number	**Contact**	**P.O. Number**	**Reviewed by**
844098	Mark Martin	3600	
Client Rep	**Project Manager**		
US NAVY - LANTDIV	Ron Kenyon		

Analysis Desired

Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	VOC 602	PAH 610	Alkalinity (310.1)	TOC BY 415.1	Sulfide (376.1)	Sulfate 375.4
1	UST820-MW19	4/16/04	14:00		X	UST820-MW19	10	X	X	X	X	X	X
2	UST820-MW11	4/16/04	9:45		X	UST820-MW11	10	X	X	X	X	X	X
3	UST820-MW11D	4/16/04	9:50		X	UST820-MW11Dup	10	X	X	X	X	X	X
4	UST820-MW21	4/16/04	15:00		X	UST820-MW21	10	X	X	X	X	X	X
5													
6													
7													
8													
9													
10													
11													

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time
1	1 -- 4		FedEx 841731637711	4/16/04	16:00
2				04/17/04	0800
3					

Remarks
Please E-mail results to mark.martin@shawgrp.com

21 Day TAT

4,2,3,8,1,4

F23496: Chain of Custody
Page 1 of 2

ACCUTEST Laboratories

Southeast
ACCUTEST.
Laboratories

05/12/04

Technical Report for

Shaw E & I, Inc.

Camp Lejeune-BM 820

844098

Accutest Job Number: F23597

Sampling Date: 04/20/04

Report to:

Shaw E & I, Inc.
5700 Thurston Ave. Suite 116-B
Virginia Beach, VA 23455
natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 33

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

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Table of Contents

Sections: 1 2 3 4 5 6

-1-

Section 1: Sample Summary 3
Section 2: Sample Results 4
2.1: F23597-1: UST820-MW26 4
2.2: F23597-2: UST820-MW26D 7
2.3: F23597-3: UST820-MW08 10
2.4: F23597-4: UST820-MW07 13
2.5: F23597-5: UST820-TB-042004 16
Section 3: Misc. Forms 17
3.1: Chain of Custody 18
Section 4: GC Volatiles - QC Data Summaries **20**
4.1: Method Blank Summary 21
4.2: Blank Spike Summary 22
4.3: Matrix Spike/Matrix Spike Duplicate Summary 23
Section 5: GC Semi-volatiles - QC Data Summaries 24
5.1: Method Blank Summary 25
5.2: Blank Spike Summary 27
5.3: Matrix Spike/Matrix Spike Duplicate Summary 28
Section 6: General Chemistry - QC Data Summaries 29
6.1: Method Blank and Spike Results Summary 30
6.2: Duplicate Results Summary 31
6.3: Matrix Spike Results Summary 32
6.4: Matrix Spike Duplicate Results Summary 33

Sample Summary

Shaw E & I, Inc.

Job No: F23597

Camp Lejeune-BM 820
Project No: 844098

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
F23597-1	04/20/04	09:40	MM	04/22/04	AQ	Ground Water	UST820-MW26
F23597-2	04/20/04	09:45	MM	04/22/04	AQ	Ground Water	UST820-MW26D
F23597-3	04/20/04	10:30	MM	04/22/04	AQ	Ground Water	UST820-MW08
F23597-4	04/20/04	11:15	MM	04/22/04	AQ	Ground Water	UST820-MW07
F23597-5	04/20/04	00:00	MM	04/22/04	AQ	Trip Blank Water	UST820-TB-042004

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW26		
Lab Sample ID:	F23597-1	Date Sampled:	04/20/04
Matrix:	AQ - Ground Water	Date Received:	04/22/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF038212.D	1	04/29/04	CV	n/a	n/a	GEF3125
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	88%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW26		
Lab Sample ID:	F23597-1	Date Sampled:	04/20/04
Matrix:	AQ - Ground Water	Date Received:	04/22/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19749.D	1	05/01/04	SM	04/23/04	OP10269	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	900 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.6	2.2	ug/l	
208-96-8	Acenaphthylene	ND	5.6	2.2	ug/l	
120-12-7	Anthracene	ND	5.6	2.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.6	2.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.6	2.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.6	2.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.6	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.6	2.2	ug/l	
218-01-9	Chrysene	ND	5.6	2.2	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.6	2.2	ug/l	
206-44-0	Fluoranthene	ND	5.6	2.2	ug/l	
86-73-7	Fluorene	ND	5.6	2.2	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.6	2.2	ug/l	
91-20-3	Naphthalene	ND	5.6	2.2	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.6	2.2	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.6	2.2	ug/l	
85-01-8	Phenanthrene	ND	5.6	2.2	ug/l	
129-00-0	Pyrene	ND	5.6	2.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	62%		42-123%
84-15-1	o-Terphenyl	90%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW26		
Lab Sample ID:	F23597-1	Date Sampled:	04/20/04
Matrix:	AQ - Ground Water	Date Received:	04/22/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/26/04	MCR	EPA 310.1
Sulfate	13.8	2.0	mg/l	1	04/26/04 11:40	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/28/04	MP	EPA 376.1
Total Organic Carbon	< 1.0	1.0	mg/l	1	05/11/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW26D		
Lab Sample ID:	F23597-2	Date Sampled:	04/20/04
Matrix:	AQ - Ground Water	Date Received:	04/22/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF038213.D	1	04/29/04	CV	n/a	n/a	GEF3125
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	81%		70-123%
98-08-8	aaa-Trifluorotoluene	86%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW26D		
Lab Sample ID:	F23597-2	Date Sampled:	04/20/04
Matrix:	AQ - Ground Water	Date Received:	04/22/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19750.D	1	05/01/04	SM	04/23/04	OP10269	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.3	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.3	2.1	ug/l	
120-12-7	Anthracene	ND	5.3	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.3	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.3	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.3	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.3	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.3	2.1	ug/l	
218-01-9	Chrysene	ND	5.3	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.3	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.3	2.1	ug/l	
86-73-7	Fluorene	ND	5.3	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.3	2.1	ug/l	
91-20-3	Naphthalene	ND	5.3	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.3	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.3	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.3	2.1	ug/l	
129-00-0	Pyrene	ND	5.3	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	88%		42-123%
84-15-1	o-Terphenyl	92%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW26D		
Lab Sample ID:	F23597-2	Date Sampled:	04/20/04
Matrix:	AQ - Ground Water	Date Received:	04/22/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/26/04	MCR	EPA 310.1
Sulfate	14.0	2.0	mg/l	1	04/26/04 11:54	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/28/04	MP	EPA 376.1
Total Organic Carbon	< 1.0	1.0	mg/l	1	05/11/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW08		
Lab Sample ID:	F23597-3	Date Sampled:	04/20/04
Matrix:	AQ - Ground Water	Date Received:	04/22/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF038214.D	1	04/29/04	CV	n/a	n/a	GEF3125
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.4	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	50.2	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	87%		70-123%
98-08-8	aaa-Trifluorotoluene	94%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW08		
Lab Sample ID:	F23597-3	Date Sampled:	04/20/04
Matrix:	AQ - Ground Water	Date Received:	04/22/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19751.D	1	05/01/04	SM	04/23/04	OP10269	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.3	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.3	2.1	ug/l	
120-12-7	Anthracene	ND	5.3	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.3	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.3	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.3	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.3	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.3	2.1	ug/l	
218-01-9	Chrysene	ND	5.3	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.3	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.3	2.1	ug/l	
86-73-7	Fluorene	ND	5.3	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.3	2.1	ug/l	
91-20-3	Naphthalene	ND	5.3	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.3	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.3	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.3	2.1	ug/l	
129-00-0	Pyrene	ND	5.3	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	78%		42-123%
84-15-1	o-Terphenyl	91%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW08		
Lab Sample ID:	F23597-3	Date Sampled:	04/20/04
Matrix:	AQ - Ground Water	Date Received:	04/22/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	< 5.0	5.0	mg/l	1	04/26/04	MCR	EPA 310.1
Sulfate	898	20	mg/l	10	04/26/04 12:38	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/28/04	MP	EPA 376.1
Total Organic Carbon	1.4	1.0	mg/l	1	05/11/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW07		
Lab Sample ID:	F23597-4	Date Sampled:	04/20/04
Matrix:	AQ - Ground Water	Date Received:	04/22/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF038204.D	1	04/28/04	CV	n/a	n/a	GEF3125
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	75%		70-123%
98-08-8	aaa-Trifluorotoluene	78%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW07		
Lab Sample ID:	F23597-4	Date Sampled:	04/20/04
Matrix:	AQ - Ground Water	Date Received:	04/22/04
Method:	EPA 610 EPA 610	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IJ19752.D	1	05/01/04	SM	04/23/04	OP10269	GIJ962
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	5.3	2.1	ug/l	
208-96-8	Acenaphthylene	ND	5.3	2.1	ug/l	
120-12-7	Anthracene	ND	5.3	2.1	ug/l	
56-55-3	Benzo(a)anthracene	ND	5.3	2.1	ug/l	
50-32-8	Benzo(a)pyrene	ND	5.3	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	5.3	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	5.3	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	5.3	2.1	ug/l	
218-01-9	Chrysene	ND	5.3	2.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	5.3	2.1	ug/l	
206-44-0	Fluoranthene	ND	5.3	2.1	ug/l	
86-73-7	Fluorene	ND	5.3	2.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	5.3	2.1	ug/l	
91-20-3	Naphthalene	ND	5.3	2.1	ug/l	
90-12-0	1-Methylnaphthalene	ND	5.3	2.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	5.3	2.1	ug/l	
85-01-8	Phenanthrene	ND	5.3	2.1	ug/l	
129-00-0	Pyrene	ND	5.3	2.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
321-60-8	2-Fluorobiphenyl	80%		42-123%
84-15-1	o-Terphenyl	92%		51-123%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW07		
Lab Sample ID:	F23597-4	Date Sampled:	04/20/04
Matrix:	AQ - Ground Water	Date Received:	04/22/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	13.0	5.0	mg/l	1	04/26/04	MCR	EPA 310.1
Sulfate	18.1	2.0	mg/l	1	04/26/04 12:53	SM	EPA 300/SW846 9056
Sulfide	< 1.0	1.0	mg/l	1	04/28/04	MP	EPA 376.1
Total Organic Carbon	3.6	1.0	mg/l	1	05/11/04	LE	EPA 415.1

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-TB-042004		
Lab Sample ID:	F23597-5	Date Sampled:	04/20/04
Matrix:	AQ - Trip Blank Water	Date Received:	04/22/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF038207.D	1	04/28/04	CV	n/a	n/a	GEF3125
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	88%		70-123%
98-08-8	aaa-Trifluorotoluene	94%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

COC Number F23597
844098-820-042004

Shaw Environmental & Infrastructure, Inc.

CHAIN-OF-CUSTODY RECORD

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390 | Receiving LAB: Accutest

Project Name	Project Location	Project Number	Contact	P.O. Number	Reviewed by
CAMP LEJEUNE - BM 820	CAMP LEJEUNE, NC	844098	Mark Martin	3600	

Client Rep: US NAVY - LANTDIV | Project Manager: Ron Kenyon

Analysis Desired

Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	VOC 602	PAH 610	Alkalinity (310.1)	TOC BY 415.1	Sulfide (376.1)	Sulfate 375.4
1	UST820-MW26	4/20/04	9:40		X	UST820-MW26	10	X	X	X	X	X	X
2	UST820-MW26D	4/20/04	9:45		X	UST820-MW26 Dup	10	X	X	X	X	X	X
3	UST820-MW08	4/20/04	10:30		X	UST820-MW08	10	X	X	X	X	X	X
4	UST820-MW07	4/20/04	11:15		X	UST820-MW07	10	X	X	X	X	X	X
5	UST820-TB-042004	4/20/04			X	UST820-TB-042004	2	X					
6													
7													
8													
9													
10													
11													

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time
1	1-5		FedEx	4/20/04	16:00
2		FED X		4/21/04	09:00
3					

Remarks
Please E-mail results to mark.martin@shawgrp.com

21 Day TAT

4-8

F23597: Chain of Custody
Page 1 of 2

ACCUTEST Laboratories

APPENDIX D

NOVEMBER 2004 GROUNDWATER LABORATORY ANALYTICAL REPORTS

Southeast
ACCUTEST.
Laboratories

11/16/04

Technical Report for

Field Support Service Inc

Camp Lejeune-BM 820

110385

Accutest Job Number: F27946

Sampling Date: 11/03/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 86

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

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Sections: 1 2 3 4 5 6

Table of Contents

Section 1: Sample Summary **3**
Section 2: Sample Results 4
2.1: F27946-1: UST820-MW09D 4
2.2: F27946-2: UST820-MW02 7
2.3: F27946-3: UST820-MW09 10
2.4: F27946-4: UST820-MW03 13
2.5: F27946-5: UST820-TB-110304 16
Section 3: Misc. Forms 17
3.1: Chain of Custody 18
Section 4: GC/MS Semi-volatiles - QC Data Summaries **20**
4.1: Method Blank Summary 21
4.2: Blank Spike Summary 23
4.3: Matrix Spike/Matrix Spike Duplicate Summary 24
4.4: Instrument Performance Checks (DFTPP) 25
4.5: Internal Standard Area Summaries 30
4.6: Surrogate Recovery Summaries 32
4.7: Initial and Continuing Calibration Summaries 33
Section 5: GC Volatiles - QC Data Summaries 48
5.1: Method Blank Summary 49
5.2: Blank Spike Summary 51
5.3: Matrix Spike/Matrix Spike Duplicate Summary 53
5.4: Surrogate Recovery Summaries 55
5.5: GC Surrogate Retention Time Summaries 56
5.6: Initial and Continuing Calibration Summaries 60
Section 6: Metals Analysis - QC Data Summaries 68
6.1: Inst QC MA4083: Pb 69
6.2: Prep QC MP7389: Pb 82

Sample Summary

Field Support Service Inc

Job No: F27946

Camp Lejeune-BM 820
Project No: 110385

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F27946-1	11/03/04	11:15	MM	11/05/04	AQ	Ground Water	UST820-MW09D
F27946-2	11/03/04	12:00	MM	11/05/04	AQ	Ground Water	UST820-MW02
F27946-3	11/03/04	12:45	MM	11/05/04	AQ	Ground Water	UST820-MW09
F27946-4	11/03/04	13:30	MM	11/05/04	AQ	Ground Water	UST820-MW03
F27946-5	11/03/04	00:00	MM	11/05/04	AQ	Trip Blank Water	UST820-TB-110304

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW09D		
Lab Sample ID:	F27946-1	Date Sampled:	11/03/04
Matrix:	AQ - Ground Water	Date Received:	11/05/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W023028.D	1	11/11/04	ME	11/09/04	OP11786	SW1200
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	92%		49-119%
321-60-8	2-Fluorobiphenyl	95%		45-118%
1718-51-0	Terphenyl-d14	101%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW09D		
Lab Sample ID:	F27946-1	Date Sampled:	11/03/04
Matrix:	AQ - Ground Water	Date Received:	11/05/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD055475.D	1	11/10/04	AJ	n/a	n/a	GCD2281
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	85%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW09D		
Lab Sample ID:	F27946-1	Date Sampled:	11/03/04
Matrix:	AQ - Ground Water	Date Received:	11/05/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/09/04	11/12/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4083
(2) Prep QC Batch: MP7389

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW02		
Lab Sample ID:	F27946-2	Date Sampled:	11/03/04
Matrix:	AQ - Ground Water	Date Received:	11/05/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024237.D	1	11/12/04	ME	11/09/04	OP11786	SL1278
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	23.6	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	25.4	4.8	0.95	ug/l	
91-20-3	Naphthalene	11.1	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	80%		49-119%
321-60-8	2-Fluorobiphenyl	82%		45-118%
1718-51-0	Terphenyl-d14	81%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW02		
Lab Sample ID:	F27946-2	Date Sampled:	11/03/04
Matrix:	AQ - Ground Water	Date Received:	11/05/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD055544.D	1	11/11/04	AJ	n/a	n/a	GCD2284
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.70	1.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	14.8	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	66.9	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	116	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	104%		70-123%
98-08-8	aaa-Trifluorotoluene	98%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW02		
Lab Sample ID:	F27946-2	Date Sampled:	11/03/04
Matrix:	AQ - Ground Water	Date Received:	11/05/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/09/04	11/12/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4083
(2) Prep QC Batch: MP7389

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW09		
Lab Sample ID:	F27946-3	Date Sampled:	11/03/04
Matrix:	AQ - Ground Water	Date Received:	11/05/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W023030.D	1	11/11/04	ME	11/09/04	OP11786	SW1200
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	1.1	4.8	0.95	ug/l	J
91-57-6	2-Methylnaphthalene	1.6	4.8	0.95	ug/l	J
91-20-3	Naphthalene	16.8	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	94%		49-119%
321-60-8	2-Fluorobiphenyl	95%		45-118%
1718-51-0	Terphenyl-d14	94%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW09		
Lab Sample ID:	F27946-3	Date Sampled:	11/03/04
Matrix:	AQ - Ground Water	Date Received:	11/05/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD055477.D	5	11/10/04	AJ	n/a	n/a	GCD2281
Run #2 [a]	CD055547.D	100	11/11/04	AJ	n/a	n/a	GCD2284

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	2360 [b]	100	50	ug/l	
108-90-7	Chlorobenzene	ND	5.0	2.5	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.5	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.5	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	ug/l	
100-41-4	Ethylbenzene	222	5.0	2.5	ug/l	
1634-04-4	Methyl Tert Butyl Ether	3930 [b]	100	50	ug/l	
108-88-3	Toluene	428	5.0	2.5	ug/l	
1330-20-7	Xylenes (total)	495	15	5.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	101%	87%	70-123%
98-08-8	aaa-Trifluorotoluene	114%	96%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW09		
Lab Sample ID:	F27946-3	Date Sampled:	11/03/04
Matrix:	AQ - Ground Water	Date Received:	11/05/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/09/04	11/12/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4083
(2) Prep QC Batch: MP7389

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW03		
Lab Sample ID:	F27946-4	Date Sampled:	11/03/04
Matrix:	AQ - Ground Water	Date Received:	11/05/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W023031.D	1	11/11/04	ME	11/09/04	OP11786	SW1200
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		49-119%
321-60-8	2-Fluorobiphenyl	90%		45-118%
1718-51-0	Terphenyl-d14	93%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW03		
Lab Sample ID:	F27946-4	Date Sampled:	11/03/04
Matrix:	AQ - Ground Water	Date Received:	11/05/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD055479.D	1	11/10/04	AJ	n/a	n/a	GCD2281
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	42.4	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	7.4	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.8	1.0	0.50	ug/l	
108-88-3	Toluene	19.4	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	52.5	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
98-08-8	aaa-Trifluorotoluene	100%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW03		
Lab Sample ID:	F27946-4	Date Sampled:	11/03/04
Matrix:	AQ - Ground Water	Date Received:	11/05/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/09/04	11/12/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4083
(2) Prep QC Batch: MP7389

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-TB-110304		
Lab Sample ID:	F27946-5	Date Sampled:	11/03/04
Matrix:	AQ - Trip Blank Water	Date Received:	11/05/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD055480.D	1	11/10/04	AJ	n/a	n/a	GCD2281
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	86%		70-123%
98-08-8	aaa-Trifluorotoluene	95%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

COC Number:
110385-820-110404

CHAIN-OF-CUSTODY RECORD F27946

Shaw™
Shaw Environmental & Infrastructure, Inc.

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-239(

Receiving LAB: Accutest

Project Name	Project Location		
CAMP LEJEUNE - BM 820	CAMP LEJEUNE, NC		
Project Number	**Contact**	**P.O. Number**	**Reviewed by**
110385	Mark Martin	FSSI	
Client Rep	**Project Manager**		
US NAVY - LANTDIV	Ron Kenyon		

Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	VOC 602	PAH 625	Lead
1	UST820-MW09D	11/3/04	11:15		X	UST820-MW09D	6	X	X	X
2	UST820-MW02	11/3/04	12:00		X	UST820-MW02	6	X	X	X
3	UST820-MW09	11/3/04	12:45		X	UST820-MW09	6	X	X	X
4	UST820-MW03	11/3/04	13:30		X	UST820-MW03	6	X	X	X
5	UST820-TB-110304	11/3/04			X	UST820-TB-110304	2	X		
6										
7										
8										
9										
10										

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time
1	1 – 5		FedEx 8481 5080 73[illegible] 53	11/4/04	16:00
2		FX	53	11/5/04	9:00
3					

Remarks
Please E-mail results to mark.martin@shawgrp.com

14 Day TAT

2.4

F27946: Chain of Custody
Page 1 of 2

Southeast
ACCUTEST.
Laboratories

11/17/04

Technical Report for

Field Support Service Inc

Camp Lejeune-BM 820

110385

Accutest Job Number: F28053

Sampling Dates: 11/06/04 - 11/08/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 74

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

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Table of Contents

Sections: 1 2 3 4 5 6

-1-

Section 1: Sample Summary 3
Section 2: Sample Results 4
2.1: F28053-1: UST820-MW15 4
2.2: F28053-2: UST820-MW04 7
2.3: F28053-3: UST820-MW06 10
2.4: F28053-4: UST820-MW12 13
2.5: F28053-5: UST820-MW13 16
2.6: F28053-6: UST820-TB-110804 19
Section 3: Misc. Forms 20
3.1: Chain of Custody 21
Section 4: GC/MS Semi-volatiles - QC Data Summaries **23**
4.1: Method Blank Summary 24
4.2: Blank Spike Summary 26
4.3: Matrix Spike/Matrix Spike Duplicate Summary 27
4.4: Instrument Performance Checks (DFTPP) 28
4.5: Internal Standard Area Summaries 32
4.6: Surrogate Recovery Summaries 34
4.7: Initial and Continuing Calibration Summaries 35
Section 5: GC Volatiles - QC Data Summaries 44
5.1: Method Blank Summary 45
5.2: Blank Spike Summary 46
5.3: Matrix Spike/Matrix Spike Duplicate Summary 47
5.4: Surrogate Recovery Summaries 48
5.5: GC Surrogate Retention Time Summaries 49
5.6: Initial and Continuing Calibration Summaries 51
Section 6: Metals Analysis - QC Data Summaries 57
6.1: Inst QC MA4086: Pb 58
6.2: Prep QC MP7402: Pb 70

Sample Summary

Field Support Service Inc

Job No: F28053

Camp Lejeune-BM 820
Project No: 110385

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F28053-1	11/06/04	10:00	MM	11/10/04	AQ	Ground Water	UST820-MW15
F28053-2	11/06/04	11:00	MM	11/10/04	AQ	Ground Water	UST820-MW04
F28053-3	11/06/04	12:00	MM	11/10/04	AQ	Ground Water	UST820-MW06
F28053-4	11/06/04	13:00	MM	11/10/04	AQ	Ground Water	UST820-MW12
F28053-5	11/06/04	14:00	MM	11/10/04	AQ	Ground Water	UST820-MW13
F28053-6	11/08/04	00:00	MM	11/10/04	AQ	Trip Blank Water	UST820-TB-110804

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW15		
Lab Sample ID:	F28053-1	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024274.D	1	11/16/04	ME	11/12/04	OP11820	SL1279
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		49-119%
321-60-8	2-Fluorobiphenyl	84%		45-118%
1718-51-0	Terphenyl-d14	86%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW15		
Lab Sample ID:	F28053-1	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF046143.D	1	11/12/04	CV	n/a	n/a	GEF3443
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	2.1	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.65	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.89	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	1.4	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	87%		70-123%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW15		
Lab Sample ID:	F28053-1	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/12/04	11/15/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4086
(2) Prep QC Batch: MP7402

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW04		
Lab Sample ID:	F28053-2	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024275.D	1	11/16/04	ME	11/12/04	OP11820	SL1279
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		49-119%
321-60-8	2-Fluorobiphenyl	84%		45-118%
1718-51-0	Terphenyl-d14	81%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW04		
Lab Sample ID:	F28053-2	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF046146.D	1	11/13/04	CV	n/a	n/a	GEF3443
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.6	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	0.63	1.0	0.50	ug/l	J
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	0.74	1.0	0.50	ug/l	J
1330-20-7	Xylenes (total)	1.3	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	83%		70-123%
98-08-8	aaa-Trifluorotoluene	89%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW04		
Lab Sample ID:	F28053-2	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/12/04	11/15/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4086
(2) Prep QC Batch: MP7402

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW06		
Lab Sample ID:	F28053-3	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024276.D	1	11/16/04	ME	11/12/04	OP11820	SL1279
Run #2	L024289.D	4	11/16/04	SM	11/12/04	OP11820	SL1280

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2	1050 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	56.0	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	90.8	4.8	0.95	ug/l	
91-20-3	Naphthalene	268 [a]	19	3.8	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	79%	81%	49-119%
321-60-8	2-Fluorobiphenyl	82%	82%	45-118%
1718-51-0	Terphenyl-d14	80%	80%	46-135%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW06		
Lab Sample ID:	F28053-3	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF046159.D	20	11/13/04	CV	n/a	n/a	GEF3443
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	212	20	10	ug/l	
108-90-7	Chlorobenzene	ND	20	10	ug/l	
95-50-1	1,2-Dichlorobenzene	121	20	10	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	10	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	20	10	ug/l	
100-41-4	Ethylbenzene	1400	20	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	12.1	20	10	ug/l	J
108-88-3	Toluene	217	20	10	ug/l	
1330-20-7	Xylenes (total)	906	60	20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	96%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW06		
Lab Sample ID:	F28053-3	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/12/04	11/15/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4086
(2) Prep QC Batch: MP7402

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW12		
Lab Sample ID:	F28053-4	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024277.D	1	11/16/04	ME	11/12/04	OP11820	SL1279
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	2.9	4.8	0.95	ug/l	J
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		49-119%
321-60-8	2-Fluorobiphenyl	84%		45-118%
1718-51-0	Terphenyl-d14	83%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW12		
Lab Sample ID:	F28053-4	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF046147.D	1	11/13/04	CV	n/a	n/a	GEF3443
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.9	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	17.0	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.71	1.0	0.50	ug/l	J
108-88-3	Toluene	1.8	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	9.5	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW12		
Lab Sample ID:	F28053-4	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/12/04	11/15/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4086
(2) Prep QC Batch: MP7402

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW13		
Lab Sample ID:	F28053-5	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024280.D	1	11/16/04	ME	11/12/04	OP11820	SL1279
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	3.2	4.8	0.95	ug/l	J
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		49-119%
321-60-8	2-Fluorobiphenyl	75%		45-118%
1718-51-0	Terphenyl-d14	76%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW13		
Lab Sample ID:	F28053-5	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	EF046148.D	1	11/13/04	CV	n/a	n/a	GEF3443
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	2.8	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	2.2	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	19.5	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.5	1.0	0.50	ug/l	
108-88-3	Toluene	19.1	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	63.6	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	98%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW13		
Lab Sample ID:	F28053-5	Date Sampled:	11/06/04
Matrix:	AQ - Ground Water	Date Received:	11/10/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/12/04	11/15/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4086
(2) Prep QC Batch: MP7402

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-TB-110804		
Lab Sample ID:	F28053-6	Date Sampled:	11/08/04
Matrix:	AQ - Trip Blank Water	Date Received:	11/10/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	EF046150.D	1	11/13/04	CV	n/a	n/a	GEF3443
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	86%		70-123%
98-08-8	aaa-Trifluorotoluene	93%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

F28053

CHAIN-OF-CUSTODY RECORD

COC Number:
110385-820-110804

Shaw
Shaw Environmental & Infrastructure, Inc.

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390

Receiving LAB: Accutest

Project Name	Project Location		
CAMP LEJEUNE - BM 820	CAMP LEJEUNE, NC		
Project Number	**Contact**	**P.O. Number**	**Reviewed by**
110385	Mark Martin	FSSI	
Client Rep	**Project Manager**		
US NAVY - LANTDIV	Ron Kenyon		

Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	VOC 602	PAH 625	Lead
1	UST820-MW15	11/6/04	10:00		X	UST820-MW15	6	X	X	X
2	UST820-MW04	11/6/04	11:00		X	UST820-MW04	6	X	X	X
3	UST820-MW06	11/6/04	12:00		X	UST820-MW06	6	X	X	X
4	UST820-MW12	11/6/04	13:00		X	UST820-MW12	6	X	X	X
5	UST820-MW13	11/6/04	14:00		X	UST820-MW13	6	X	X	X
6	UST820-TB-110804	11/8/04	—		X	UST820-TB-110804	2	X		
7										
8										
9										
10										

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time
1	1 – 6		FedEx 8481 50807331	11/8/04	16:00
2		FX		11/10/04	9:00
3					

Remarks
Please E-mail results to mark.martin@shawgrp.com

14 Day TAT

2.8

F28053: Chain of Custody
Page 1 of 2

Southeast
ACCUTEST.
Laboratories

12/08/04

Technical Report for

Field Support Service Inc

Camp Lejeune-BM 820

110385

Accutest Job Number: F28379

Sampling Dates: 11/20/04 - 11/22/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 119

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sections: 1 2 3 4 5

Table of Contents

Section 1: Sample Summary 3
Section 2: Sample Results 5
2.1: F28379-1: UST820-MW19 5
2.2: F28379-2: UST820-MW18 8
2.3: F28379-3: UST820-MW21 11
2.4: F28379-4: UST820-MW20 14
2.5: F28379-5: UST820-MW17 17
2.6: F28379-6: UST820-MW16 20
2.7: F28379-7: UST820-MW14 23
2.8: F28379-8: UST820-MW26 26
2.9: F28379-9: UST820-MW07 29
2.10: F28379-10: UST820-MW08 32
2.11: F28379-11: UST820-MW05 35
2.12: F28379-12: UST820-PW01 38
2.13: F28379-13: UST820-MW11 41
2.14: F28379-14: UST820-MW27 44
Section 3: GC/MS Semi-volatiles - QC Data Summaries 47
3.1: Method Blank Summary 48
3.2: Blank Spike Summary 50
3.3: Matrix Spike/Matrix Spike Duplicate Summary 51
3.4: Instrument Performance Checks (DFTPP) 52
3.5: Internal Standard Area Summaries 58
3.6: Surrogate Recovery Summaries 60
3.7: Initial and Continuing Calibration Summaries 61
Section 4: GC Volatiles - QC Data Summaries 79
4.1: Method Blank Summary 80
4.2: Blank Spike Summary 82
4.3: Matrix Spike/Matrix Spike Duplicate Summary 84
4.4: Surrogate Recovery Summaries 86
4.5: GC Surrogate Retention Time Summaries 87
4.6: Initial and Continuing Calibration Summaries 92
Section 5: Metals Analysis - QC Data Summaries 101
5.1: Inst QC MA4109: Pb 102
5.2: Prep QC MP7449: Pb 115

Sample Summary

Field Support Service Inc

Job No: F28379

Camp Lejeune-BM 820
Project No: 110385

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F28379-1	11/20/04	10:00	MM	11/23/04	AQ	Ground Water	UST820-MW19
F28379-2	11/20/04	10:50	MM	11/23/04	AQ	Ground Water	UST820-MW18
F28379-3	11/20/04	11:30	MM	11/23/04	AQ	Ground Water	UST820-MW21
F28379-4	11/20/04	12:00	MM	11/23/04	AQ	Ground Water	UST820-MW20
F28379-5	11/20/04	12:30	MM	11/23/04	AQ	Ground Water	UST820-MW17
F28379-6	11/20/04	13:00	MM	11/23/04	AQ	Ground Water	UST820-MW16
F28379-7	11/20/04	13:30	MM	11/23/04	AQ	Ground Water	UST820-MW14
F28379-8	11/20/04	14:00	MM	11/23/04	AQ	Ground Water	UST820-MW26
F28379-9	11/20/04	14:30	MM	11/23/04	AQ	Ground Water	UST820-MW07
F28379-10	11/20/04	15:00	MM	11/23/04	AQ	Ground Water	UST820-MW08
F28379-11	11/22/04	10:00	MM	11/23/04	AQ	Ground Water	UST820-MW05
F28379-12	11/22/04	11:00	MM	11/23/04	AQ	Ground Water	UST820-PW01
F28379-13	11/22/04	11:30	MM	11/23/04	AQ	Ground Water	UST820-MW11

Sample Summary
(continued)

Field Support Service Inc

Job No: F28379

Camp Lejeune-BM 820
Project No: 110385

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F28379-14	11/22/04	12:15	MM	11/23/04	AQ	Ground Water	UST820-MW27
F28379-15	11/22/04	00:00	MM	11/23/04	AQ	Trip Blank Water	UST820-TB-112204

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW19		
Lab Sample ID:	F28379-1	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024396.D	1	11/29/04	ME	11/26/04	OP11931	SL1286
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.96	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.96	ug/l	
120-12-7	Anthracene	ND	4.8	0.96	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.96	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.96	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.96	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.96	ug/l	
218-01-9	Chrysene	ND	4.8	0.96	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.96	ug/l	
86-73-7	Fluorene	ND	4.8	0.96	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.96	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.96	ug/l	
91-20-3	Naphthalene	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.96	ug/l	
129-00-0	Pyrene	ND	4.8	0.96	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		49-119%
321-60-8	2-Fluorobiphenyl	84%		45-118%
1718-51-0	Terphenyl-d14	47%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW19		
Lab Sample ID:	F28379-1	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD056009.D	1	11/24/04	AJ	n/a	n/a	GCD2305
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.57	1.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.7	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	82%		70-123%
98-08-8	aaa-Trifluorotoluene	91%		73-122%

(a) Sample was treated with an anti-foaming agent. All hits confirmed by dual-column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW19		
Lab Sample ID:	F28379-1	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/24/04	11/30/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW18		
Lab Sample ID:	F28379-2	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024397.D	1	11/29/04	ME	11/26/04	OP11931	SL1286
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.9	0.97	ug/l	
208-96-8	Acenaphthylene	ND	4.9	0.97	ug/l	
120-12-7	Anthracene	ND	4.9	0.97	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.9	0.97	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.9	0.97	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.9	0.97	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.9	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.9	0.97	ug/l	
218-01-9	Chrysene	ND	4.9	0.97	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.9	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.9	0.97	ug/l	
86-73-7	Fluorene	ND	4.9	0.97	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.9	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.9	0.97	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.9	0.97	ug/l	
91-20-3	Naphthalene	ND	4.9	0.97	ug/l	
85-01-8	Phenanthrene	ND	4.9	0.97	ug/l	
129-00-0	Pyrene	ND	4.9	0.97	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	84%		49-119%
321-60-8	2-Fluorobiphenyl	85%		45-118%
1718-51-0	Terphenyl-d14	77%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW18		
Lab Sample ID:	F28379-2	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD056010.D	1	11/24/04	AJ	n/a	n/a	GCD2305
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	82%		70-123%
98-08-8	aaa-Trifluorotoluene	91%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW18		
Lab Sample ID:	F28379-2	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/24/04	11/30/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW21		
Lab Sample ID:	F28379-3	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024398.D	1	11/29/04	ME	11/26/04	OP11931	SL1286
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	70%		49-119%
321-60-8	2-Fluorobiphenyl	71%		45-118%
1718-51-0	Terphenyl-d14	76%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW21		
Lab Sample ID:	F28379-3	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD056011.D	1	11/24/04	AJ	n/a	n/a	GCD2305
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.84	1.0	0.50	ug/l	J
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	83%		70-123%
98-08-8	aaa-Trifluorotoluene	91%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW21		
Lab Sample ID:	F28379-3	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/24/04	11/30/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW20		
Lab Sample ID:	F28379-4	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024401.D	1	11/29/04	ME	11/26/04	OP11931	SL1286
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	89%		49-119%
321-60-8	2-Fluorobiphenyl	90%		45-118%
1718-51-0	Terphenyl-d14	85%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW20		
Lab Sample ID:	F28379-4	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD056012.D	1	11/24/04	AJ	n/a	n/a	GCD2305
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	81%		70-123%
98-08-8	aaa-Trifluorotoluene	91%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW20		
Lab Sample ID:	F28379-4	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/24/04	11/30/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW17		
Lab Sample ID:	F28379-5	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024402.D	1	11/29/04	ME	11/26/04	OP11931	SL1286
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.96	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.96	ug/l	
120-12-7	Anthracene	ND	4.8	0.96	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.96	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.96	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.96	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.96	ug/l	
218-01-9	Chrysene	ND	4.8	0.96	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.96	ug/l	
86-73-7	Fluorene	ND	4.8	0.96	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.96	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.96	ug/l	
91-20-3	Naphthalene	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.96	ug/l	
129-00-0	Pyrene	ND	4.8	0.96	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	88%		49-119%
321-60-8	2-Fluorobiphenyl	85%		45-118%
1718-51-0	Terphenyl-d14	72%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW17		
Lab Sample ID:	F28379-5	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD056013.D	1	11/24/04	AJ	n/a	n/a	GCD2305
Run #2 [a]	CD056090.D	50	11/29/04	AJ	n/a	n/a	GCD2309

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	242 [b]	50	25	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1760 [b]	50	25	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	2.3	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	92%	77%	70-123%
98-08-8	aaa-Trifluorotoluene	104%	95%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW17		
Lab Sample ID:	F28379-5	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead [a]	< 15	15	ug/l	1	11/24/04	11/30/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

(a) Elevated reporting limits due to matrix interference.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW16		
Lab Sample ID:	F28379-6	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024403.D	1	11/29/04	ME	11/26/04	OP11931	SL1286
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		49-119%
321-60-8	2-Fluorobiphenyl	84%		45-118%
1718-51-0	Terphenyl-d14	79%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW16		
Lab Sample ID:	F28379-6	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD056093.D	1	11/29/04	AJ	n/a	n/a	GCD2309
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	2.6	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.60	1.0	0.50	ug/l	J
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	82%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW16		
Lab Sample ID:	F28379-6	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/24/04	11/30/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW14		
Lab Sample ID:	F28379-7	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024404.D	1	11/29/04	ME	11/26/04	OP11931	SL1286
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	90%		49-119%
321-60-8	2-Fluorobiphenyl	91%		45-118%
1718-51-0	Terphenyl-d14	89%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW14		
Lab Sample ID:	F28379-7	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD056095.D	1	11/29/04	AJ	n/a	n/a	GCD2309
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.93	1.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.6	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	83%		70-123%
98-08-8	aaa-Trifluorotoluene	96%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW14		
Lab Sample ID:	F28379-7	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/24/04	11/30/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW26		
Lab Sample ID:	F28379-8	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024405.D	1	11/29/04	ME	11/26/04	OP11931	SL1286
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		49-119%
321-60-8	2-Fluorobiphenyl	74%		45-118%
1718-51-0	Terphenyl-d14	80%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW26		
Lab Sample ID:	F28379-8	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD056017.D	1	11/24/04	AJ	n/a	n/a	GCD2305
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.0	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	4.3	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	82%		70-123%
98-08-8	aaa-Trifluorotoluene	91%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW26		
Lab Sample ID:	F28379-8	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	11.0	5.0	ug/l	1	11/24/04	11/30/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW07		
Lab Sample ID:	F28379-9	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024406.D	1	11/29/04	ME	11/26/04	OP11931	SL1286
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		49-119%
321-60-8	2-Fluorobiphenyl	88%		45-118%
1718-51-0	Terphenyl-d14	87%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW07		
Lab Sample ID:	F28379-9	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD056018.D	1	11/24/04	AJ	n/a	n/a	GCD2305
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.56	1.0	0.50	ug/l	J
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	84%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW07		
Lab Sample ID:	F28379-9	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	7.7	5.0	ug/l	1	11/24/04	11/30/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW08		
Lab Sample ID:	F28379-10	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024407.D	1	11/29/04	ME	11/26/04	OP11931	SL1286
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	87%		49-119%
321-60-8	2-Fluorobiphenyl	89%		45-118%
1718-51-0	Terphenyl-d14	87%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW08		
Lab Sample ID:	F28379-10	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	CD056019.D	1	11/24/04	AJ	n/a	n/a	GCD2305
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	1.3	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	15.1	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	83%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW08		
Lab Sample ID:	F28379-10	Date Sampled:	11/20/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	27.0	5.0	ug/l	1	11/24/04	11/30/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW05		
Lab Sample ID:	F28379-11	Date Sampled:	11/22/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024408.D	1	11/29/04	ME	11/26/04	OP11931	SL1286
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	75%		49-119%
321-60-8	2-Fluorobiphenyl	77%		45-118%
1718-51-0	Terphenyl-d14	79%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW05		
Lab Sample ID:	F28379-11	Date Sampled:	11/22/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD056020.D	1	11/24/04	AJ	n/a	n/a	GCD2305
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	84%		70-123%
98-08-8	aaa-Trifluorotoluene	92%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW05		
Lab Sample ID:	F28379-11	Date Sampled:	11/22/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/24/04	11/30/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-PW01		
Lab Sample ID:	F28379-12	Date Sampled:	11/22/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024409.D	1	11/29/04	ME	11/26/04	OP11931	SL1286
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	2.3	4.8	0.95	ug/l	J
91-57-6	2-Methylnaphthalene	1.1	4.8	0.95	ug/l	J
91-20-3	Naphthalene	10.8	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	89%		49-119%
321-60-8	2-Fluorobiphenyl	90%		45-118%
1718-51-0	Terphenyl-d14	85%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-PW01		
Lab Sample ID:	F28379-12	Date Sampled:	11/22/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD056021.D	1	11/24/04	AJ	n/a	n/a	GCD2305
Run #2 [a]	CD056092.D	2	11/29/04	AJ	n/a	n/a	GCD2309

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	109 [b]	2.0	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	78.2	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	11.6	1.0	0.50	ug/l	
108-88-3	Toluene	48.3	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	333 [b]	6.0	2.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	99%	99%	70-123%
98-08-8	aaa-Trifluorotoluene	101%	101%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-PW01		
Lab Sample ID:	F28379-12	Date Sampled:	11/22/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/24/04	11/30/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW11		
Lab Sample ID:	F28379-13	Date Sampled:	11/22/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W023202.D	1	11/30/04	ME	11/26/04	OP11931	SW1209
Run #2	L024410.D	4	11/29/04	ME	11/26/04	OP11931	SL1286

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2	1040 ml	1.0 ml

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.96	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.96	ug/l	
120-12-7	Anthracene	ND	4.8	0.96	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.96	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.96	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.96	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.96	ug/l	
218-01-9	Chrysene	ND	4.8	0.96	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.96	ug/l	
86-73-7	Fluorene	ND	4.8	0.96	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	44.4	4.8	0.96	ug/l	
91-57-6	2-Methylnaphthalene	52.1	4.8	0.96	ug/l	
91-20-3	Naphthalene	139 [a]	19	3.8	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.96	ug/l	
129-00-0	Pyrene	ND	4.8	0.96	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%	74%	49-119%
321-60-8	2-Fluorobiphenyl	76%	77%	45-118%
1718-51-0	Terphenyl-d14	81%	74%	46-135%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW11		
Lab Sample ID:	F28379-13	Date Sampled:	11/22/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD056022.D	1	11/24/04	AJ	n/a	n/a	GCD2305
Run #2 [a]	CD056091.D	50	11/29/04	AJ	n/a	n/a	GCD2309

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	7.4	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	111 [b]	50	25	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	722 [b]	50	25	ug/l	
1330-20-7	Xylenes (total)	2450 [b]	150	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	112%	90%	70-123%
98-08-8	aaa-Trifluorotoluene	105%	97%	73-122%

(a) All hits confirmed by dual column analysis.
(b) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW11		
Lab Sample ID:	F28379-13	Date Sampled:	11/22/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	11/24/04	11/30/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW27		
Lab Sample ID:	F28379-14	Date Sampled:	11/22/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L024411.D	1	11/30/04	ME	11/26/04	OP11931	SL1286
Run #2							

	Initial Volume	Final Volume
Run #1	1040 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.96	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.96	ug/l	
120-12-7	Anthracene	ND	4.8	0.96	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.96	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.96	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.96	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.96	ug/l	
218-01-9	Chrysene	ND	4.8	0.96	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.96	ug/l	
86-73-7	Fluorene	ND	4.8	0.96	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.96	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.96	ug/l	
91-20-3	Naphthalene	ND	4.8	0.96	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.96	ug/l	
129-00-0	Pyrene	ND	4.8	0.96	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		49-119%
321-60-8	2-Fluorobiphenyl	81%		45-118%
1718-51-0	Terphenyl-d14	83%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW27		
Lab Sample ID:	F28379-14	Date Sampled:	11/22/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD056096.D	1	11/29/04	AJ	n/a	n/a	GCD2309
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	1.4	3.0	1.0	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	86%		70-123%
98-08-8	aaa-Trifluorotoluene	97%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID:	UST820-MW27		
Lab Sample ID:	F28379-14	Date Sampled:	11/22/04
Matrix:	AQ - Ground Water	Date Received:	11/23/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	6.0	5.0	ug/l	1	11/24/04	11/30/04 SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4109
(2) Prep QC Batch: MP7449

RL = Reporting Limit

Southeast
ACCUTEST
Laboratories

12/09/04

Technical Report for

Field Support Service Inc

Camp Lejeune-BM 820

110385

Accutest Job Number: F28588

Sampling Date: 11/30/04

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 33

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

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Sections: 1 2 3 4 5 6

Table of Contents

-1-

Section 1: Sample Summary 3
Section 2: Sample Results 4
2.1: F28588-1: UST820-MW22 4
2.2: F28588-2: UST820-MW23 7
2.3: F28588-3: UST820-MW24 10
2.4: F28588-4: UST820-MW25 13
2.5: F28588-5: UST820-TB-112204 16
Section 3: Misc. Forms 17
3.1: Chain of Custody 18
Section 4: GC/MS Semi-volatiles - QC Data Summaries 20
4.1: Method Blank Summary 21
4.2: Blank Spike Summary 22
4.3: Matrix Spike/Matrix Spike Duplicate Summary 23
Section 5: GC Volatiles - QC Data Summaries 24
5.1: Method Blank Summary 25
5.2: Blank Spike Summary 26
5.3: Matrix Spike/Matrix Spike Duplicate Summary 27
Section 6: Metals Analysis - QC Data Summaries 28
6.1: Prep QC MP7487: Pb 29

Sample Summary

Field Support Service Inc

Job No: F28588

Camp Lejeune-BM 820
Project No: 110385

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
F28588-1	11/30/04	12:30	MM	12/04/04	AQ	Ground Water	UST820-MW22
F28588-2	11/30/04	11:30	MM	12/04/04	AQ	Ground Water	UST820-MW23
F28588-3	11/30/04	14:00	MM	12/04/04	AQ	Ground Water	UST820-MW24
F28588-4	11/30/04	13:15	MM	12/04/04	AQ	Ground Water	UST820-MW25
F28588-5	11/30/04	00:00	MM	12/04/04	AQ	Trip Blank Water	UST820-TB-112204

Report of Analysis

Client Sample ID:	UST820-MW22		
Lab Sample ID:	F28588-1	Date Sampled:	11/30/04
Matrix:	AQ - Ground Water	Date Received:	12/04/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W023278.D	1	12/07/04	SM	12/07/04	OP12011	SW1213
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	85%		49-119%
321-60-8	2-Fluorobiphenyl	83%		45-118%
1718-51-0	Terphenyl-d14	91%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST820-MW22		
Lab Sample ID:	F28588-1	Date Sampled:	11/30/04
Matrix:	AQ - Ground Water	Date Received:	12/04/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QQ000447.D	1	12/07/04	CV	n/a	n/a	GQQ20
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%		70-123%
98-08-8	aaa-Trifluorotoluene	105%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@30883 16:46 09-Dec-2004

Report of Analysis

Client Sample ID:	UST820-MW22		
Lab Sample ID:	F28588-1	Date Sampled:	11/30/04
Matrix:	AQ - Ground Water	Date Received:	12/04/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	12/06/04	12/08/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4129
(2) Prep QC Batch: MP7487

RL = Reporting Limit

Report of Analysis

Client Sample ID:	UST820-MW23		
Lab Sample ID:	F28588-2	Date Sampled:	11/30/04
Matrix:	AQ - Ground Water	Date Received:	12/04/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W023279.D	1	12/07/04	SM	12/07/04	OP12011	SW1213
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	76%		49-119%
321-60-8	2-Fluorobiphenyl	73%		45-118%
1718-51-0	Terphenyl-d14	73%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest LabLink@30883 16:46 09-Dec-2004

Report of Analysis

Client Sample ID:	UST820-MW23		
Lab Sample ID:	F28588-2	Date Sampled:	11/30/04
Matrix:	AQ - Ground Water	Date Received:	12/04/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QQ000450.D	1	12/08/04	CV	n/a	n/a	GQQ20
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	95%		70-123%
98-08-8	aaa-Trifluorotoluene	105%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST820-MW23		
Lab Sample ID:	F28588-2	Date Sampled:	11/30/04
Matrix:	AQ - Ground Water	Date Received:	12/04/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	5.4	5.0	ug/l	1	12/06/04	12/08/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4129
(2) Prep QC Batch: MP7487

RL = Reporting Limit

Report of Analysis

Client Sample ID:	UST820-MW24		
Lab Sample ID:	F28588-3	Date Sampled:	11/30/04
Matrix:	AQ - Ground Water	Date Received:	12/04/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W023280.D	1	12/07/04	SM	12/07/04	OP12011	SW1213
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		49-119%
321-60-8	2-Fluorobiphenyl	72%		45-118%
1718-51-0	Terphenyl-d14	71%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST820-MW24		
Lab Sample ID:	F28588-3	Date Sampled:	11/30/04
Matrix:	AQ - Ground Water	Date Received:	12/04/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QQ000452.D	1	12/08/04	CV	n/a	n/a	GQQ20
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	93%		70-123%
98-08-8	aaa-Trifluorotoluene	102%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST820-MW24		
Lab Sample ID:	F28588-3	Date Sampled:	11/30/04
Matrix:	AQ - Ground Water	Date Received:	12/04/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Lead	5.2	5.0	ug/l	1	12/06/04	12/08/04 SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4129
(2) Prep QC Batch: MP7487

RL = Reporting Limit

Report of Analysis

Client Sample ID:	UST820-MW25		
Lab Sample ID:	F28588-4	Date Sampled:	11/30/04
Matrix:	AQ - Ground Water	Date Received:	12/04/04
Method:	EPA 625 EPA 625	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W023281.D	1	12/07/04	SM	12/07/04	OP12011	SW1213
Run #2							

	Initial Volume	Final Volume
Run #1	1050 ml	1.0 ml
Run #2		

BN PAH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.8	0.95	ug/l	
208-96-8	Acenaphthylene	ND	4.8	0.95	ug/l	
120-12-7	Anthracene	ND	4.8	0.95	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.8	0.95	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.8	0.95	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.8	0.95	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.8	1.9	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.8	0.95	ug/l	
218-01-9	Chrysene	ND	4.8	0.95	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.8	1.9	ug/l	
206-44-0	Fluoranthene	ND	4.8	0.95	ug/l	
86-73-7	Fluorene	ND	4.8	0.95	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.8	1.9	ug/l	
90-12-0	1-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.8	0.95	ug/l	
91-20-3	Naphthalene	ND	4.8	0.95	ug/l	
85-01-8	Phenanthrene	ND	4.8	0.95	ug/l	
129-00-0	Pyrene	ND	4.8	0.95	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	78%		49-119%
321-60-8	2-Fluorobiphenyl	77%		45-118%
1718-51-0	Terphenyl-d14	79%		46-135%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST820-MW25		
Lab Sample ID:	F28588-4	Date Sampled:	11/30/04
Matrix:	AQ - Ground Water	Date Received:	12/04/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	QQ000453.D	1	12/08/04	CV	n/a	n/a	GQQ20
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	1.5	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	94%		70-123%
98-08-8	aaa-Trifluorotoluene	105%		73-122%

(a) All hits confirmed by dual column analysis.

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	UST820-MW25		
Lab Sample ID:	F28588-4	Date Sampled:	11/30/04
Matrix:	AQ - Ground Water	Date Received:	12/04/04
		Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Lead	< 5.0	5.0	ug/l	1	12/06/04	12/08/04	SM	SW846 6010B [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA4129
(2) Prep QC Batch: MP7487

RL = Reporting Limit

Report of Analysis

Client Sample ID:	UST820-TB-112204		
Lab Sample ID:	F28588-5	Date Sampled:	11/30/04
Matrix:	AQ - Trip Blank Water	Date Received:	12/04/04
Method:	EPA 601/602	Percent Solids:	n/a
Project:	Camp Lejeune-BM 820		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QQ000454.D	1	12/08/04	CV	n/a	n/a	GQQ20
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Full List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.50	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.50	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.50	ug/l	
108-88-3	Toluene	ND	1.0	0.50	ug/l	
1330-20-7	Xylenes (total)	ND	3.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
352-33-0	1-Chloro-4-fluorobenzene	97%		70-123%
98-08-8	aaa-Trifluorotoluene	106%		73-122%

ND = Not detected MDL - Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

COC Number:
110385-820-113004

CHAIN-OF-CUSTODY RECORD F28588

Shaw
Shaw Environmental & Infrastructure, Inc.

Shaw E & I - Piney Green Rd. Lot 203 Bld 626 - 910-451-2390

Receiving LAB: Accutest

Project Name	Project Location		
CAMP LEJEUNE - BM 820	CAMP LEJEUNE, NC		
Project Number	**Contact**	**P.O. Number**	**Reviewed by**
110385	Mark Martin	FSSI	
Client Rep	**Project Manager**		
US NAVY - LANTDIV	Ron Kenyon		

Item No.	Sample Number	Date	Time	Comp	Grab	Sample Description	Number of Containers	VOC 602	PAH 625	Lead	Analysis Desired
1	UST820-MW22	11/30/04	12:30		X	UST820-MW22	6	X	X	X	
2	UST820-MW23	11/30/04	11:30		X	UST820-MW23	6	X	X	X	
3	UST820-MW24	11/30/04	14:00		X	UST820-MW24	6	X	X	X	
4	UST820-MW25	11/30/04	13:15		X	UST820-MW25	6	X	X	X	
5	UST820-TB-112204	11/30/04			X	Trip Blank	2	X			
6											
7											
8											
9											
10											

Transfer Number	Item Number	Transfers Relinquished By	Transfers Accepted By	Date	Time
1	1 -- 5		FedEx 8481 5073 5486	12/3/04	16:00
2		FX		12/4/04	9:00
3					

Remarks
Please E-mail results to mark.martin@shawgrp.com

14 Day TAT

F28588: Chain of Custody
Page 1 of 2

APPENDIX E
HISTORICAL GROUNDWATER ANALYTICAL RESULTS

CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type II Well: **MW-2**

Client Sample ID:		UST820-MW02-02B	UST820-MW02-02C	UST820-MW02	UST820-MW02	UST820-MW02	UST820-MW02
Date Sampled:		04/26/02	10/30/02	04/18/03	10/13/03	04/14/04	11/03/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 602							
Benzene	1	**19.4**	**95.2**	**0.84 J**	<1.0	<1.0	**0.7 J**
Chlorobenzene	50	<10	<10	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	210	<10	**22.5**	<5.0	<1.0	**1.7**	<1.0
Ethylbenzene	29	**34.9**	**212**	**21.1**	**5.4**	**0.83 J**	**14.8**
Xylenes (total)	530	**285**	**778**	**100**	**31.6**	**9.1**	**116.0**
Toluene	1000	**402**	**966**	**82**	**8.6**	**1.2**	**66.9**
Total BTEX		**741.3**	**2051.2**	**203.94**	**45.6**	**11.13**	**198.4**
EPA 610							
Chrysene	5	<50	<56	<5.4	<5.0	<5.4	<4.8
Naphthalene	21	**52.9**	**167**	<5.4	**3.2 J**	**3.4 J**	**11.1**
Acenaphthene	80	<50	<56	<5.4	<5.0	<5.4	<4.8
Acenaphthylene	210	<50	<56	<5.4	<5.0	<5.4	<4.8
Benzo(a)anthracene	0.05	<50	<56	<5.4	<5.0	<5.4	<4.8
Pyrene	210	<50	<56	<5.4	<5.0	<5.4	<4.8
Fluorene	280	<50	<56	<5.4	<5.0	<5.4	<4.8
Anthracene	2100	<50	<56	<5.4	<5.0	<5.4	<4.8
Fluoranthene	280	<50	<56	<5.4	<5.0	<5.4	<4.8
Phenanthrene	210	<50	<56	<5.4	<5.0	<5.4	<4.8
SW846-6010B							
Lead	15	NA	NA	NA	NA	NA	<5.0
Bold type indicates detectable concentrations.							
Shaded area indicates detectable concentrations above the groundwater quality standards.							

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

Printed: 3/23/2005
Samples analyzed by Compuchem, STL, or Accutest

CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type II Well: **MW-3**

Client Sample ID:		UST820-MW03					
Date Sampled:		11/03/04					
Analyte (ug/l)	**Action Level**	**Result**					
EPA 602							
Benzene	1	**42.4**					
Chlorobenzene	50	<1.0					
Methyl tert-butyl ether	210	**4.8**					
Ethylbenzene	29	**7.4**					
Xylenes (total)	530	**52.5**					
Toluene	1000	**19.4**					
Total BTEX		**198.4**					
EPA 610							
Chrysene	5	<4.8					
Naphthalene	21	<4.8					
Acenaphthene	80	<4.8					
Acenaphthylene	210	<4.8					
Benzo(a)anthracene	0.05	<4.8					
Pyrene	210	<4.8					
Fluorene	280	<4.8					
Anthracene	2100	<4.8					
Fluoranthene	280	<4.8					
Phenanthrene	210	<4.8					
SW846-6010B							
Lead	15	<5.0					
Bold type indicates detectable concentrations.							
Shaded area indicates detectable concentrations above the groundwater quality standards.							

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

Printed: 3/23/2005
Samples analyzed by Compuchem, STL, or Accutest

CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type II Well: **MW-4**

Client Sample ID:		143GW025	143GW047	143GW075	143GW106		143GW133	143GW144	143GW155	143GW176	143GW191
Date Sampled:		08/19/97	02/11/98	05/12/98	08/15/98	11/17/98	02/26/99	05/18/99	09/10/99	11/17/99	05/18/00
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601											
1,2-Dichlorobenzene	620	**0.12 JP**	<0.8	<1	<1	<1	<1	<10	<1	<5	<1
1,3-Dichlorobenzene	620	<0.8	**0.079 JP**	<0.8	<0.8	<1	<1	<10	<1	<5	<1
1,4-Dichlorobenzene	75	**0.27 JP**	<1.5	<1.5	<1.5	**0.81 J**	<1	<10	<1	<5	<1
Dibromochloromethane	0.41	NA	NA	NA	NA	NA	<1	<10	<1	<5	<1
Chloroform	0.19	NA	NA	NA	NA	NA	<1	<10	<1	<5	<1
Chloromethane	2.6	NA	NA	NA	NA	NA	<1	<10	<1	<5	<1
1,2-Dichloroethane	0.38	NA	NA	NA	NA	NA	<1	<10	<1	<5	<1
EPA 602											
Benzene	1	**2.8 P**	**0.5 P**	<0.5	**1.1**	**1.6**	<1	<10	**3.8**	**161**	<1
Chlorobenzene	50	<0.5	<0.5	**0.37 J**	<0.5	<1	<1	<10	<1	<5	<1
Methyl tert-butyl ether	210	**11 P**	**30**	<5	**6.9**	**14**	**316**	**652**	**73.3**	**118**	<1
Ethylbenzene	29	**0.68 J**	**0.27 JP**	**0.12 J**	**0.17 J**	**0.22 J**	<1	<10	**7.1**	**17.6**	<1
Xylenes (total)	530	**1.55 JP**	**1.34 JBP**	**0.32 J**	**1.21 J**	**2.96 J**	<3	<30	<3	**87**	<3
Toluene	1000	**2.1 P**	**0.88 JBP**	**0.85 J**	**1.8 J**	**0.69 J**	<1	<10	<1	**75.4**	<1
Total BTEX		**7.13**	**2.99**	**1.29**	**4.28**	**5.47**			**10.9**	**341**	
EPA 610											
Chrysene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	2100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SW846-6010B											
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bold type indicates detectable concentrations.											
Shaded area indicates detectable concentrations above the groundwater quality standards.											

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

Printed: 3/23/2005
Samples analyzed by Compuchem, STL, or Accutest

CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type II Well: **MW-4**

Client Sample ID:		143GW202	143GW213	CL-143-GW-224	GW-224	UST820-MW04-01C3	UST820-MW04-02B	UST820-MW04-02C	UST820-MW04	UST820-MW04	UST820-MW04	UST820-MW04
Date Sampled:		08/29/00	12/13/00	03/19/01	06/21/01	10/02/01	04/26/02	10/28/02	04/14/03	10/07/03	04/15/04	11/06/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601												
1,2-Dichlorobenzene	620	<2	<1	<4	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	620	<2	<1	<4	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	<2	<1	<4	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	0.41	<2	<1	<4	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	0.19	<2	<1	<4	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane	2.6	<2	<1	<4	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	0.38	<2	<1	<4	NA	NA	NA	NA	NA	NA	NA	NA
EPA 602												
Benzene	1	<1	<1	**13**	<6.0	**9.6**	<1.0	**5.2**	<1.0	<1.0	<1.0	**1.6**
Chlorobenzene	50	<2	<1	<4	<6.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	210	**0.79 J**	<5	**380**	**600**	**36**	**0.75 J**	**0.68 J**	<1.0	**1.5**	<1.0	<1.0
Ethylbenzene	29	<2	<1	**3.7 J**	<6.0	**16**	<1.0	**3.1**	<1.0	<1.0	<1.0	**0.63 J**
Xylenes (total)	530	<6	<1	**9.6**	<6.0	**100**	**5.4**	**9.3**	<3.0	<3.0	<3.0	**1.3 J**
Toluene	1000	<2	<1	**10**	**1.7 J**	**72**	<1.0	**5.4**	<1.0	<1.0	<1.0	**0.74 J**
Total BTEX				**36.3**	**1.7**	**197.6**	**5.4**	**23**				**4.27**
EPA 610												
Chrysene	5	NA	NA	NA	<0.10	<0.10	<5.0	<5.2	<5.2	<5.0	<5.2	<4.8
Naphthalene	21	NA	NA	NA	<2.0	<2.0	<5.0	<5.2	<5.2	<5.0	<5.2	<4.8
Acenaphthene	80	NA	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.2	<5.0	<5.2	<4.8
Acenaphthylene	210	NA	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.2	<5.0	<5.2	<4.8
Benzo(a)anthracene	0.05	NA	NA	NA	<0.10	<0.10	<5.0	<5.2	<5.2	<5.0	<5.2	<4.8
Pyrene	210	NA	NA	NA	<0.10	<0.25	<5.0	<5.2	<5.2	<5.0	<5.2	<4.8
Fluorene	280	NA	NA	NA	<2.0	<2.0	<5.0	<5.2	<5.2	<5.0	<5.2	<4.8
Anthracene	2100	NA	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.2	<5.0	<5.2	<4.8
Fluoranthene	280	NA	NA	NA	<0.20	<0.25	<5.0	<5.2	<5.2	<5.0	<5.2	<4.8
Phenanthrene	210	NA	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.2	<5.0	<5.2	<4.8
SW846-6010B												
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
Bold type indicates detectable concentrat		**Bold type indicates detectable concentrations.**										
Shaded area indicates detectable concen		**Shaded area indicates detectable concentrations above the groundwater quality standards.**										

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

Printed: 3/23/2005
Samples analyzed by Compuchem, STL, or Accutest

CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type II Well: **MW-5**

Client Sample ID:		143GW024	143GW046	143GW077	143GW107		143GW134	143GW145	143GW164	143GW177	143GW200	143GW210
Date Sampled:		08/20/97	02/11/98	05/12/98	08/15/98	11/17/98	02/26/99	05/18/99	09/10/99	11/17/99	05/18/00	08/29/00
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601												
1,2-Dichlorobenzene	620	**0.52 J**	<5	<2	<1	<1	<1	<1	<1	<5	<1	<2
1,3-Dichlorobenzene	620	<0.8	<3.8	<1.5	<0.8	<1	<1	<1	<1	<5	<1	<2
1,4-Dichlorobenzene	75	<1.5	<7.5	<3	**0.18 JB**	<1	<1	<1	<1	<5	<1	<2
Dibromochloromethane	0.41	NA	NA	NA	NA	NA	<1	<1	<1	<5	<1	<2
Chloroform	0.19	NA	NA	NA	NA	NA	<1	<1	<1	<5	<1	<2
Chloromethane	2.6	NA	NA	NA	NA	NA	<1	<1	<1	<5	<1	<2
1,2-Dichloroethane	0.38	NA	NA	NA	NA	NA	<1	<1	<1	<5	<1	<2
EPA 602												
Benzene	1	<0.5	**21 P**	**2.2 P**	**1.9**	<1	<1	<1	<1	**47.2**	**6.1**	**216**
Chlorobenzene	50	<0.5	<2.5	<1	<0.5	<1	<1	<1	<1	<5	<1	<2
Methyl tert-butyl ether	210	**0.17 J**	**280**	**88 P**	**17**	**1.8 J**	**266**	**68.9**	**21**	**100**	**6.4**	**20**
Ethylbenzene	29	**0.066 J**	**1.8 J**	<1.5	**0.14 J**	<1	<1	<1	<1	**41.1**	**4.9**	**11.1**
Xylenes (total)	530	**0.064 J**	**8.7 JBP**	**0.64 J**	**0.82 J**	<3	<3	<3	<3	**269**	**23.9**	**6.8**
Toluene	1000	**0.054 J**	**8.1 JBP**	**0.29 JBP**	**0.21 J**	**0.3 J**	<1	<1	<1	**270**	**36.2**	**46.4**
Total BTEX		**0.184**	**39.6**	**3.13**	**3.07**	**0.3**				**627**	**71.1**	**280.3**
EPA 610												
Chrysene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	2100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SW846-6010B												
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Bold type indicates detectable concentrations.										
		Shaded area indicates detectable concentrations above the groundwater quality standards.										

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Project #110385

Analytical Data Summary

Type II Well: **MW-5**

Client Sample ID:		143GW221	CL-143-GW-232	GW-232	Well Dry	Well Dry	Well Dry	UST820-MW05	UST820-MW05	UST820-MW05	UST820-MW05
Date Sampled:		12/13/00	03/19/01	06/26/01	10/02/01	04/26/02	10/28/02	04/08/03	10/09/03	04/13/04	11/20/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601											
1,2-Dichlorobenzene	620	<1	<1	NA				NA	NA	NA	NA
1,3-Dichlorobenzene	620	<1	<1	NA				NA	NA	NA	NA
1,4-Dichlorobenzene	75	<1	<1	NA				NA	NA	NA	NA
Dibromochloromethane	0.41	<1	<1	NA				NA	NA	NA	NA
Chloroform	0.19	<1	<1	NA				NA	NA	NA	NA
Chloromethane	2.6	<1	<1	NA				NA	NA	NA	NA
1,2-Dichloroethane	0.38	<1	<1	NA				NA	NA	NA	NA
EPA 602											
Benzene	1	**30**	**18**	**3.4**				<1.0	<1.0	<1.0	<1.0
Chlorobenzene	50	<1	<1	<1.0				<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	210	<5	**3.2 J**	**0.72 J**				<1.0	<1.0	<1.0	<1.0
Ethylbenzene	29	**5.6**	**2.8**	**1.3**				<1.0	<1.0	**0.62 J**	<1.0
Xylenes (total)	530	**14**	**4**	**7.5**				<3.0	<3.0	**3.4**	<3.0
Toluene	1000	**19**	**11**	**7.7**				<1.0	<1.0	**1.5**	<1.0
Total BTEX		**68.6**	**35.8**	**19.9**						**5.52**	**0**
EPA 610											
Chrysene	5	NA	NA	<0.10				<5.2	<5.3	<5.4	<4.8
Naphthalene	21	NA	NA	<2.0				<5.2	<5.3	<5.4	<4.8
Acenaphthene	80	NA	NA	<1.0				<5.2	<5.3	<5.4	<4.8
Acenaphthylene	210	NA	NA	<1.0				<5.2	<5.3	<5.4	<4.8
Benzo(a)anthracene	0.05	NA	NA	<0.10				<5.2	<5.3	<5.4	<4.8
Pyrene	210	NA	NA	<0.10				<5.2	<5.3	<5.4	<4.8
Fluorene	280	NA	NA	<2.0				<5.2	<5.3	<5.4	<4.8
Anthracene	2100	NA	NA	<1.0				<5.2	<5.3	<5.4	<4.8
Fluoranthene	280	NA	NA	<0.20				<5.2	<5.3	<5.4	<4.8
Phenanthrene	210	NA	NA	<1.0				<5.2	<5.3	<5.4	<4.8
SW846-6010B											
Lead	15	NA	NA	NA				NA	NA	NA	<5.0
		Bold type indicates detectable concentrations.									
		Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Project #110385

Analytical Data Summary

Type II Well: **MW-6**

Client Sample ID:		UST820-MW06					
Date Sampled:		11/06/04					
Analyte (ug/l)	**Action Level**	**Result**					
EPA 602							
Benzene	1	**212.0**					
Chlorobenzene	50	<20					
Methyl tert-butyl ether	210	**12.1 J**					
Ethylbenzene	29	**1400.0**					
Xylenes (total)	530	**906.0**					
Toluene	1000	**217.0**					
Total BTEX		**2735**					
EPA 610							
Chrysene	5	<4.8					
Naphthalene	21	**268.0**					
Acenaphthene	80	<4.8					
Acenaphthylene	210	<4.8					
Benzo(a)anthracene	0.05	<4.8					
Pyrene	210	<4.8					
Fluorene	280	<4.8					
Anthracene	2100	<4.8					
Fluoranthene	280	<4.8					
Phenanthrene	210	<4.8					
SW846-6010B							
Lead	15	<5.0					
Bold type indicates detectable concentrations.							
Shaded area indicates detectable concentrations above the groundwater quality standards.							

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Samples analyzed by Compuchem, STL, or Accutest

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Project #110385

Analytical Data Summary

Type III Well: **MW-7**

Client Sample ID:		143GW027	143GW053	143GW084	143GW108		143GW142	143GW153	143GW163	143GW181	143GW199	143GW209
Date Sampled:		08/19/97	02/11/98	05/12/98	08/15/98	11/17/98	02/26/99	05/18/99	09/10/99	11/17/99	05/18/00	08/29/00
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601												
1,2-Dichlorobenzene	620	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
1,3-Dichlorobenzene	620	<0.8	<0.8	<0.8	<0.8	<1	<1	<1	<1	<1	<1	<2
1,4-Dichlorobenzene	75	<1.5	**0.12 J**	**0.34 J**	**1.2 JB**	**0.82 J**	<1	<1	<1	<1	<1	<2
Dibromochloromethane	0.41	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
Chloroform	0.19	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
Chloromethane	2.6	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
1,2-Dichloroethane	0.38	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
EPA 602												
Benzene	1	<0.5	**0.1 J**	<0.5	**0.11 J**	<1	**7.5**	**36.6**	**47.9**	**7.1**	**4.7**	**46**
Chlorobenzene	50	<0.5	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<2
Methyl tert-butyl ether	210	**0.82 J**	**0.67 J**	**0.21 J**	**1.8 J**	**1.2 J**	**8.3**	**19**	**4.2**	**8.6**	**91.4**	**86.9**
Ethylbenzene	29	<0.8	**0.15 JB**	<0.8	<0.8	<1	**3.3**	**12.6**	**11.3**	**12.8**	<1	**7.8**
Xylenes (total)	530	<3	**0.95 JB**	**0.26 J**	<3	<3	**7.4**	**51.3**	**43.5**	**77.4**	<3	**14.7**
Toluene	1000	<2	**1.2 JB**	**0.79 JB**	<2	**0.26 J**	**24.9**	**59.6**	**39.5**	**42.8**	<1	**25.8**
Total BTEX			**2.4**	**1.05**	**0.11**	**0.26**	**43.1**	**160.1**	**142.2**	**140.1**	**4.7**	**94.3**
EPA 610												
Chrysene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	2100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SW846-6010B												
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Bold type indicates detectable concentrations.										
		Shaded area indicates detectable concentrations above the groundwater quality standards.										

J= estimated
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B= detected in blank
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Analytical Data Summary

Type III Well: **MW-7**

Client Sample ID:		143GW220	CL-143-GW-231	GW-231	UST820-MW07-01C3	UST820-MW07-02B	UST820-MW07-02C	UST820-MW07	UST820-MW07	UST820-MW07	UST820-MW07
Date Sampled:		12/13/00	03/19/01	06/26/01	09/27/01	04/26/02	10/30/02	04/18/03	10/23/03	04/20/04	11/20/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601											
1,2-Dichlorobenzene	620	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	620	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	0.41	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	0.19	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane	2.6	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	0.38	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
EPA 602											
Benzene	1	**21**	**18**	<1.0	<2.0	<1.0	<1.0	<1.0	**5.3**	<1.0	**0.56 J**
Chlorobenzene	50	<1	<1	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	210	**28**	**39**	**1.7 J**	<2.0	**48.3**	**14.1**	**2.9**	**1.6**	<1.0	<1.0
Ethylbenzene	29	**4.9**	**3.8**	<1.0	<2.0	<1.0	<1.0	<1.0	**1.3**	<1.0	<1.0
Xylenes (total)	530	**13**	**9.6**	<1.0	<4.0	**1.8 J**	<3.0	<3.0	**9.4**	<3.0	<3.0
Toluene	1000	**15**	**14**	**0.35 J**	<2.0	**1.8**	<1.0	<1.0	**3.6**	<1.0	<1.0
Total BTEX		**53.9**	**45.4**	**0.35**		**3.6**			**19.6**		**0.56**
EPA 610											
Chrysene	5	NA	NA	<0.10	<0.10	<5.5	<5.3	<5.0	<5.1	<5.3	<4.8
Naphthalene	21	NA	NA	<2.0	<2.0	<5.5	<5.3	<5.0	<5.1	<5.3	<4.8
Acenaphthene	80	NA	NA	<1.0	<1.0	<5.5	<5.3	<5.0	<5.1	<5.3	<4.8
Acenaphthylene	210	NA	NA	<1.0	<1.0	<5.5	<5.3	<5.0	<5.1	<5.3	<4.8
Benzo(a)anthracene	0.05	NA	NA	<0.10	<0.10	<5.5	<5.3	<5.0	<5.1	<5.3	<4.8
Pyrene	210	NA	NA	<0.10	<0.25	<5.5	<5.3	<5.0	<5.1	<5.3	<4.8
Fluorene	280	NA	NA	<2.0	<2.0	<5.5	<5.3	<5.0	<5.1	<5.3	<4.8
Anthracene	2100	NA	NA	<1.0	<1.0	<5.5	<5.3	<5.0	<5.1	<5.3	<4.8
Fluoranthene	280	NA	NA	<0.20	<0.25	<5.5	<5.3	<5.0	<5.1	<5.3	<4.8
Phenanthrene	210	NA	NA	<1.0	<1.0	<5.5	<5.3	<5.0	<5.1	<5.3	<4.8
SW846-6010B											
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	**7.7**
		Bold type indicates detectable concentrations.									
		Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Project #110385

Analytical Data Summary

Type II Well: **MW-8**

Client Sample ID:		GW-238	UST820-MW08-01C3	UST820-MW08-02B	UST820-MW08-02C	UST820-MW08	UST820-MW08	UST820-MW08	UST820-MW08	
Date Sampled:		06/26/01	09/27/01	04/26/02	10/30/02	04/18/03	10/23/03	04/20/04	11/20/04	
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	
EPA 602										
Benzene	1	**3.2 J**	**5.4**	<1.0	<1.0	<1.0	**12.9**	**1.4**	**1.3**	
Chlorobenzene	50	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Methyl tert-butyl ether	210	**180**	**140**	**172**	**95.8**	**2.7**	**33.2**	**50.2**	**15.1**	
Ethylbenzene	29	<5.0	<5.0	<1.0	<1.0	<1.0	**2.1**	<1.0	<1.0	
Xylenes (total)	530	<5.0	<5.0	<3.0	<3.0	<3.0	**12.2**	<3.0	<3.0	
Toluene	1000	**1.6 J**	<5.0	**1.3**	<1.0	<1.0	**6.7**	<1.0	<1.0	
Total BTEX		**4.8**	**5.4**	**1.3**			**33.9**	**1.4**	**1.3**	
EPA 610										
Chrysene	5	<0.10	<0.10	<5.5	<5.2	<5.1	<5.1	<5.3	<4.8	
Naphthalene	21	<2.0	<2.0	<5.5	<5.2	<5.1	<5.1	<5.3	<4.8	
Acenaphthene	80	<1.0	<1.0	<5.5	<5.2	<5.1	<5.1	<5.3	<4.8	
Acenaphthylene	210	<1.0	<1.0	<5.5	<5.2	<5.1	<5.1	<5.3	<4.8	
Benzo(a)anthracene	0.05	<0.10	<0.10	<5.5	<5.2	<5.1	<5.1	<5.3	<4.8	
Pyrene	210	<0.10	<0.25	<5.5	<5.2	<5.1	<5.1	<5.3	<4.8	
Fluorene	280	<2.0	<2.0	<5.5	<5.2	<5.1	<5.1	<5.3	<4.8	
Anthracene	2100	<1.0	<1.0	<5.5	<5.2	<5.1	<5.1	<5.3	<4.8	
Fluoranthene	280	<0.20	<0.25	<5.5	<5.2	<5.1	<5.1	<5.3	<4.8	
Phenanthrene	210	<1.0	<1.0	<5.5	<5.2	<5.1	<5.1	<5.3	<4.8	
SW846-6010B										
Lead	15	NA	NA	NA	NA	NA	NA	NA	**27.0**	
		Bold type indicates detectable concentrations.								
		Shaded area indicates detectable concentrations above the groundwater quality standards.								

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B= detected in blank
NA= not analyzed

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Project #110385

Analytical Data Summary

Type III Well: **MW-9**

Client Sample ID:		143GW021	143GW048	143GW078			143GW135	143GW146	143GW161	143GW175	143GW197	143GW207
Date Sampled:		08/19/97	02/11/98	05/12/98	08/15/98	11/17/98	02/26/99	05/18/99	09/10/99	11/17/99	05/18/00	08/29/00
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601												
1,2-Dichlorobenzene	620	<2000	<1	<500	<10	<380	<10	<200	<10	<50	<5	<2
1,3-Dichlorobenzene	620	<1500	<0.8	<380	<7.5	<290	<10	<200	<10	<50	<5	<2
1,4-Dichlorobenzene	75	**740 J**	<1.5	<750	**2.6 JB**	<580	<10	<200	<10	<50	<5	<2
Dibromochloromethane	0.41	NA	NA	NA	NA	NA	<10	<200	<10	<50	<5	<2
Chloroform	0.19	NA	NA	NA	NA	NA	<10	<200	<10	<50	<5	<2
Chloromethane	2.6	NA	NA	NA	NA	NA	<10	<200	<10	<50	<5	<2
1,2-Dichloroethane	0.38	NA	NA	NA	NA	NA	<10	<200	<10	<50	<5	<2
EPA 602												
Benzene	1	**8500**	**0.45 J**	**4400 P**	**3300**	**5000**	**4140**	**5620**	**6170**	**1190**	**2580**	**3390**
Chlorobenzene	50	<1000	<0.5	<250	<5	<190	<10	<200	<10	<50	<5	<2
Methyl tert-butyl ether	210	<10000	**31**	<2500	**1300 J**	**14000**	**11600**	**14000**	**16700**	**55.2**	**7150**	**9260**
Ethylbenzene	29	**2800**	**0.19 JP**	**740**	**600 J**	**480**	**368**	**411**	**1030**	**736**	**217**	**291**
Xylenes (total)	530	**13300**	**1.21 JBP**	**2010 B**	**1780 J**	**1120 J**	**785**	**917**	**2760**	**5990**	**507**	**735**
Toluene	1000	**32000**	**0.82 JBP**	**4700 B**	**2500 B**	**1200**	**959**	**1340**	**1760**	**5480**	**747**	**1060**
Total BTEX		**56600**	**2.67**	**11850**	**8180**	**7800**	**6252**	**8288**	**11720**	**13396**	**4051**	**5476**
EPA 610												
Chrysene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	2100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SW846-6010B												
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Bold type indicates detectable concentrations.										
		Shaded area indicates detectable concentrations above the groundwater quality standards.										

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type III Well: **MW-9**

Client Sample ID:		143GW218	CL-143-GW-229	GW-239	UST820-MW09-01C3	UST820-MW09-02B	UST820-MW09-02C	UST820-MW09	UST820-MW09	UST820-MW09	UST820-MW09
Date Sampled:		12/13/00	03/19/01	06/21/01	10/01/01	04/24/02	10/28/02	04/16/03	10/21/03	04/14/04	11/3/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601											
1,2-Dichlorobenzene	620	<1	<50	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	620	<1	<50	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	<1	<50	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	0.41	<1	<50	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	0.19	<1	<50	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane	2.6	<1	<50	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	0.38	<1	<50	NA	NA	NA	NA	NA	NA	NA	NA
EPA 602											
Benzene	1	**2900**	**2000**	**2700**	**2600**	**1770**	**1450**	**2340**	**1960**	**1170**	**2360.0**
Chlorobenzene	50	<50	<50	<80	<200	<50	<50	<1.0	<50	<20	<5.0
Methyl tert-butyl ether	210	**7700**	**5100**	**6400**	**7000**	**4070**	**4200**	**4530**	**4110**	**2620**	**3930.0**
Ethylbenzene	29	**280**	**180**	**300**	**250**	**159**	**125**	**241**	**155**	**225**	**222.0**
Xylenes (total)	530	**740**	**490**	**820**	**690**	**447**	**348**	**556**	**389**	**532**	**495**
Toluene	1000	**990**	**710**	**1200 B**	**1100**	**645**	**488**	**466**	**416**	**375**	**428**
Total BTEX		**4910**	**3380**	**5020**	**4640**	**3021**	**2411**	**3603**	**2920**	**2302**	**3505**
EPA 610											
Chrysene	5	NA	NA	<0.10	<0.10	<5.0	<5.2	<5.1	<5.1	<5.4	<4.8
Naphthalene	21	NA	NA	**25**	**24**	**9.6**	**15.6**	**24.4**	**15.9**	**14.8**	**16.8**
Acenaphthene	80	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.1	<5.1	<5.4	<4.8
Acenaphthylene	210	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.1	<5.1	<5.4	<4.8
Benzo(a)anthracene	0.05	NA	NA	<0.10	<0.10	<5.0	<5.2	<5.1	<5.1	<5.4	<4.8
Pyrene	210	NA	NA	<0.10	<0.25	<5.0	<5.2	<5.1	<5.1	<5.4	<4.8
Fluorene	280	NA	NA	<2.0	<2.0	<5.0	<5.2	<5.1	<5.1	<5.4	<4.8
Anthracene	2100	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.1	<5.1	<5.4	<4.8
Fluoranthene	280	NA	NA	<0.20	<0.25	<5.0	<5.2	<5.1	<5.1	<5.4	<4.8
Phenanthrene	210	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.1	<5.1	<5.4	<4.8
SW846-6010B											
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
		Bold type indicates detectable concentrations.									
		Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type III Well: **MW-9D**

Client Sample ID:		UST820-MW19D-01C3	UST820-MW09D-02B	UST820-MW09D-02C	UST820-MW09D	UST820-MW09D	UST820-MW09D	UST820-MW09D
Date Sampled:		10/03/01	04/24/02	10/28/02	04/14/03	10/13/03	04/14/04	11/3/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 602								
Benzene	1	<1.0	**2**	**19.9**	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	210	<10	**1.2**	**2.5**	<10	<10	<10	<1.0
Ethylbenzene	29	<1.0	**0.73 J**	**7.8**	<1.0	<1.0	<1.0	<1.0
Xylenes (total)	530	<2.0	**1.8 J**	**22**	<3.0	<3.0	<3.0	<3.0
Toluene	1000	<1.0	**1.7**	**17.3**	<1.0	<1.0	<1.0	<1.0
Total BTEX			**6.23**	**67**				**0**
EPA 610								
Chrysene	5	<0.10	<5.5	<5.2	<5.2	<5.1	<5.4	<4.8
Naphthalene	21	<2.0	<5.5	<5.2	<5.2	<5.1	<5.4	<4.8
Acenaphthene	80	<1.0	<5.5	<5.2	<5.2	<5.1	<5.4	<4.8
Acenaphthylene	210	<1.0	<5.5	<5.2	<5.2	<5.1	<5.4	<4.8
Benzo(a)anthracene	0.05	<0.10	<5.5	<5.2	<5.2	<5.1	<5.4	<4.8
Pyrene	210	<0.25	<5.5	<5.2	<5.2	<5.1	<5.4	<4.8
Fluorene	280	<2.0	<5.5	<5.2	<5.2	<5.1	<5.4	<4.8
Anthracene	2100	<1.0	<5.5	<5.2	<5.2	<5.1	<5.4	<4.8
Fluoranthene	280	<0.25	<5.5	<5.2	<5.2	<5.1	<5.4	<4.8
Phenanthrene	210	<1.0	<5.5	<5.2	<5.2	<5.1	<5.4	<4.8
SW846-6010B								
Lead	15	NA	NA	NA	NA	NA	NA	<5.0
Bold type indicates detectable concentrations.								
Shaded area indicates detectable concentrations above the groundwater quality standards.								

J= estimated
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B= detected in blank
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Project #110385

Analytical Data Summary

Type II Well: **MW-10**

Client Sample ID:		143GW023	143GW051	143GW081	143GW111		143GW137	143GW147	143GW158	143GW172	143GW195	143GW205
Date Sampled:		08/19/97	02/11/98	05/12/98	08/15/98	11/17/98	02/27/99	05/18/99	09/10/99	11/17/99	05/18/00	08/29/00
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601												
1,2-Dichlorobenzene	620	**0.33 J**	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
1,3-Dichlorobenzene	620	**0.098 J**	<0.8	<0.8	<0.8	<1	<1	<1	<1	<1	<1	<2
1,4-Dichlorobenzene	75	<1.5	<1.5	<1.5	**0.23 J**	<1	<1	<1	<1	<1	<1	<2
Dibromochloromethane	0.41	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
Chloroform	0.19	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
Chloromethane	2.6	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
1,2-Dichloroethane	0.38	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
EPA 602												
Benzene	1	**0.067 J**	**6.2**	<0.5	**0.99**	<1	**8.3**	**60.4**	**7.7**	**2.6**	<1	<1
Chlorobenzene	50	**0.047 J**	<0.5	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<2
Methyl tert-butyl ether	210	**0.21 J**	**9.6**	**18 P**	**20**	<5	**12.6**	**11.6**	**3.8**	**8.4**	**10.7**	**5.5**
Ethylbenzene	29	**0.093 J**	**0.26 JBP**	**0.15 JP**	**0.16 J**	<1	**2.3**	**11.5**	**10.9**	**7.1**	<1	<2
Xylenes (total)	530	**0.333 J**	**1.24 JB**	**0.53 JP**	**0.44 J**	<3	**3.2**	**24.7**	**110**	**32.2**	<3	<6
Toluene	1000	**0.11 J**	**1.1 JB**	**1.1 JBP**	**0.25 JB**	**0.29 J**	**4.7**	**30.7**	**100**	**14.2**	<1	<2
Total BTEX		**0.603**	**8.8**	**1.78**	**1.84**	**0.29**	**18.5**	**127.3**	**228.6**	**56.1**		
EPA 610												
Chrysene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	2100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Bold type indicates detectable concentrations.										
		Shaded area indicates detectable concentrations above the groundwater quality standards.										

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Project #110385

Analytical Data Summary

Type II Well: **MW-10**

Client Sample ID:		143GW216	CL-143-GW-227	GW-227	UST820-MW10-01C3	UST820-MW10-02B	UST820-MW10-02C	UST820-MW10	No Sample	No Sample	No Sample
Date Sampled:		12/13/00	03/19/01	06/22/01	09/26/01	04/24/02	10/30/02	04/14/03	10/09/03	04/13/04	11/15/2004
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601											
1,2-Dichlorobenzene	620	<1	<1	NA	NA	NA	NA	NA	NS	NS	NS
1,3-Dichlorobenzene	620	<1	<1	NA	NA	NA	NA	NA	NS	NS	NS
1,4-Dichlorobenzene	75	<1	<1	NA	NA	NA	NA	NA	NS	NS	NS
Dibromochloromethane	0.41	<1	<1	NA	NA	NA	NA	NA	NS	NS	NS
Chloroform	0.19	<1	<1	NA	NA	NA	NA	NA	NS	NS	NS
Chloromethane	2.6	<1	<1	NA	NA	NA	NA	NA	NS	NS	NS
1,2-Dichloroethane	0.38	<1	<1	NA	NA	NA	NA	NA	NS	NS	NS
EPA 602											
Benzene	1	<1	**0.21 J**	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS
Chlorobenzene	50	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS
Methyl tert-butyl ether	210	**7.4**	**7.8**	**11**	<10	**7**	**9**	**6.9**	NS	NS	NS
Ethylbenzene	29	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	NS	NS	NS
Xylenes (total)	530	<1	<1	<1.0	<2.0	<2.0	<2.0	<3.0	NS	NS	NS
Toluene	1000	<1	**0.23 J**	**0.41 J**	<1.0	<1.0	<1.0	<1.0	NS	NS	NS
Total BTEX			**0.44**	**0.41**							
EPA 610											
Chrysene	5	NA	NA	<0.10	<0.10	<5.5	<5.1	<5.0	NS	NS	NS
Naphthalene	21	NA	NA	<2.0	<2.0	<5.5	<5.1	<5.0	NS	NS	NS
Acenaphthene	80	NA	NA	<1.0	<1.0	<5.5	<5.1	<5.0	NS	NS	NS
Acenaphthylene	210	NA	NA	<1.0	<1.0	<5.5	<5.1	<5.0	NS	NS	NS
Benzo(a)anthracene	0.05	NA	NA	<0.10	<0.10	<5.5	<5.1	<5.0	NS	NS	NS
Pyrene	210	NA	NA	<0.10	<0.25	<5.5	<5.1	<5.0	NS	NS	NS
Fluorene	280	NA	NA	<2.0	<2.0	<5.5	<5.1	<5.0	NS	NS	NS
Anthracene	2100	NA	NA	<1.0	<1.0	<5.5	<5.1	<5.0	NS	NS	NS
Fluoranthene	280	NA	NA	<0.20	<0.25	<5.5	<5.1	<5.0	NS	NS	NS
Phenanthrene	210	NA	NA	<1.0	<1.0	<5.5	<5.1	<5.0	NS	NS	NS
		Bold type indicates detectable concentrations.									
		Shaded area indicates detectable concentrations above the groundwater quality standards.									

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Project #110385

Analytical Data Summary

Type II Well: **MW-11**

Client Sample ID:		143GW019	143GW045	143GW076			143GW140	143GW151	143GW156	143GW178	143GW192	143GW211
Date Sampled:		08/19/97	02/11/98	05/12/98	08/15/98	11/17/98	02/27/99	05/18/99	09/10/99	11/17/99	05/18/00	08/29/00
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601												
1,2-Dichlorobenzene	620	<2000	<100	<500	<10	<200	<1	<100	<50	<20	<20	<20
1,3-Dichlorobenzene	620	<1500	<75	<380	<7.5	<150	<1	<100	<50	<20	<20	<20
1,4-Dichlorobenzene	75	<3000	<150	<750	**3.2 JB**	<300	<1	<100	<50	<20	<20	<20
Dibromochloromethane	0.41	NA	NA	NA	NA	NA	<1	<100	<50	<20	<20	<20
Chloroform	0.19	NA	NA	NA	NA	NA	<1	<100	<50	<20	<20	<20
Chloromethane	2.6	NA	NA	NA	NA	NA	<1	<100	<50	<20	<20	<20
1,2-Dichloroethane	0.38	NA	NA	NA	NA	NA	<1	<100	<50	<20	<20	<20
EPA 602												
Benzene	1	**6900**	**340 P**	**590 P**	**760**	**880**	<1	**1040**	**445**	**3630**	**1360**	**647**
Chlorobenzene	50	<1000	<50	<250	<5	<100	<1	<100	<50	<20	<20	<20
Methyl tert-butyl ether	210	<10000	**47 JP**	<2500	**20 J**	<1000	**116**	<100	<50	**10200**	**390**	**117**
Ethylbenzene	29	**3300**	**100 P**	**630 B**	**550 J**	**640**	**173**	**578**	**382**	**613**	**1110**	**881**
Xylenes (total)	530	**18600**	**650 PB**	**4400 B**	**3700 J**	**3900**	**1250**	**3700**	**3720**	**1510**	**7760**	**6140**
Toluene	1000	**29000**	**420 PB**	**4400 B**	**3700 B**	**2800**	**1770**	**5330**	**3650**	**1040**	**8220**	**6690**
Total BTEX		**57800**	**1510**	**10020**	**8710**	**8220**	**3193**	**10648**	**8197**	**6793**	**18450**	**14358**
EPA 610												
Chrysene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	2100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SW846-6010B												
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Bold type indicates detectable concentrations.										
		Shaded area indicates detectable concentrations above the groundwater quality standards.										

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Analytical Data Summary

Type II Well: **MW-11**

Client Sample ID:		143GW222	CL-143-GW-233	GW-233	UST820-MW11-01C3	UST820-MW11-02B	UST820-MW11-02C	UST820-MW11	UST820-MW11	UST820-MW11	UST820-MW11
Date Sampled:		12/13/00	03/19/01	06/26/01	10/02/01	04/26/02	10/30/02	04/18/03	10/21/03	04/16/04	11/22/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601											
1,2-Dichlorobenzene	620	<1	<100	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	620	<1	<100	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	<1	<100	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	0.41	<1	<100	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	0.19	<1	<100	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane	2.6	<1	<100	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	0.38	<1	<100	NA	NA	NA	NA	NA	NA	NA	NA
EPA 602											
Benzene	1	**1000**	**700**	**410**	**130**	**45.1**	**49.3**	**7.5 J**	**84.7**	<20	**7.4**
Chlorobenzene	50	<100	<100	**170 J**	<50	<10	**1.1**	<10	<10	<20	<1.0
Methyl tert-butyl ether	210	<500	**190 J**	<1000	<500	<10	**20.2**	**89.7**	**20.7**	<20	<1.0
Ethylbenzene	29	**1000**	**1000**	**1400**	**340**	**481**	**91.5**	**35.6**	**42.2**	**31.6**	**111.0**
Xylenes (total)	530	**7800**	**7000**	**9000**	**2600**	**3270**	**1580**	**1290**	**1610**	**2180**	**2450.0**
Toluene	1000	**9100**	**8200**	**11000**	**2900**	**2900**	**594**	**284**	**310**	**264**	**722**
Total BTEX		**18900**	**16900**	**21810**	**5970**	**6696.1**	**2314.8**	**1617.1**	**2046.9**	**2475.6**	**3290.4**
EPA 610											
Chrysene	5	NA	NA	<0.50	<0.10	<20	<53	<40	<20	<5.6	<4.8
Naphthalene	21	NA	NA	**250**	**7.5**	**163**	**271**	**140**	**81.1**	**92.3**	**139.0**
Acenaphthene	80	NA	NA	<5.0	**1.2 P**	<20	<53	<40	<20	<5.6	<4.8
Acenaphthylene	210	NA	NA	<5.0	**11**	<20	<53	<40	<20	<5.6	<4.8
Benzo(a)anthracene	0.05	NA	NA	<0.50	<0.10	<20	<53	<40	<20	<5.6	<4.8
Pyrene	210	NA	NA	<0.50	<0.25	<20	<53	<40	<20	<5.6	<4.8
Fluorene	280	NA	NA	<10	<2.0	<20	<53	<40	<20	<5.6	<4.8
Anthracene	2100	NA	NA	<5.0	<1.0	<20	<53	<40	<20	<5.6	<4.8
Fluoranthene	280	NA	NA	<1.0	<0.25	<20	<53	<40	<20	<5.6	<4.8
Phenanthrene	210	NA	NA	<5.0	<1.0	<20	<53	<40	<20	<5.6	<4.8
SW846-6010B											
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
		Bold type indicates detectable concentrations.									
		Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
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B= detected in blank
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Analytical Data Summary

Type II Well: **MW-12**

Client Sample ID:		143GW020	143GW050	143GW079	143GW113		143GW136	143GW148	143GW157	143GW174	143GW193	143GW206
Date Sampled:		08/19/97	02/11/98	05/12/98	08/15/98	11/17/98	02/26/99	05/18/99	09/10/99	11/17/99	05/18/00	08/29/00
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601												
1,2-Dichlorobenzene	620	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
1,3-Dichlorobenzene	620	<0.8	<0.8	<0.8	<0.8	<1	<1	<1	<1	<1	<1	<2
1,4-Dichlorobenzene	75	<1.5	<1.5	<1.5	<1.5	**0.36 J**	<1	<1	<1	<1	<1	<2
Dibromochloromethane	0.41	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
Chloroform	0.19	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
Chloromethane	2.6	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
1,2-Dichloroethane	0.38	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
EPA 602												
Benzene	1	**0.13 J**	<0.5	**0.17 J**	**1.2**	**0.21 J**	**35.1**	**12.6**	**9.2**	**14.7**	<1	<1
Chlorobenzene	50	<0.5	**1.1**	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<2
Methyl tert-butyl ether	210	**0.27 J**	**11**	**0.75 J**	**1.4 J**	**1 J**	**5.1**	**5**	**10.3**	**2**	<1	**2.5**
Ethylbenzene	29	**0.075 J**	**0.17 JB**	<0.8	**0.49 J**	**0.29 J**	**7.5**	**4.4**	**10.3**	**28**	<1	<2
Xylenes (total)	530	**0.216 J**	**0.74 JBP**	**0.43 J**	**2.08 J**	<3	**12.6**	**9.6**	**102**	**106**	<3	<6
Toluene	1000	**0.2 J**	**0.34 JBP**	**0.91 JB**	**2.9 B**	**0.65 J**	**16.3**	**8.4**	**114**	**57.6**	<1	<2
Total BTEX		**0.621**	**1.25**	**1.51**	**6.67**	**1.15**	**71.5**	**35**	**235.5**	**206.3**		
EPA 610												
Chrysene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	2100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SW846-6010B												
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Bold type indicates detectable concentrations.										
		Shaded area indicates detectable concentrations above the groundwater quality standards.										

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type II Well: **MW-12**

Client Sample ID:		143GW217	CL-143-GW-228	GW-228	UST820-MW12-01C3	UST820-MW12-02B	UST820-MW12-02C	UST820-MW12	UST820-MW12	UST820-MW12	UST820-MW12
Date Sampled:		12/13/00	03/19/01	06/21/01	09/26/01	04/25/02	10/28/02	04/09/03	10/21/03	04/14/04	11/06/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601											
1,2-Dichlorobenzene	620	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	620	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	0.41	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	0.19	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane	2.6	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	0.38	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
EPA 602											
Benzene	1	<1	**0.15 J**	<1.0	<1.0	<1.0	<1.0	<1.0	**0.83 J**	<1.0	**1.9**
Chlorobenzene	50	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	210	<5	**4.4 J**	**3.9J**	<10	**2.2**	<1.0	<1.0	<1.0	<1.0	**0.71 J**
Ethylbenzene	29	<1	<1	<1.0	<1.0	<1.0	**1.7**	<1.0	<1.0	<1.0	**17.0**
Xylenes (total)	530	<1	<1	<1.0	<2.0	<3.0	**47.8**	<3.0	<3.0	<3.0	**9.5**
Toluene	1000	<1	<1	**0.38 J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.8**
Total BTEX			**0.15**	**0.38**			**49.5**		**0.83**		**30.2**
EPA 610											
Chrysene	5	NA	NA	<0.10	<0.10	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Naphthalene	21	NA	NA	<2.0	<2.0	<5.0	<5.2	<5.1	<5.1	<5.2	**2.9**
Acenaphthene	80	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Acenaphthylene	210	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Benzo(a)anthracene	0.05	NA	NA	<0.10	<0.10	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Pyrene	210	NA	NA	<0.10	<0.25	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Fluorene	280	NA	NA	<2.0	<2.0	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Anthracene	2100	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Fluoranthene	280	NA	NA	<0.20	<0.25	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Phenanthrene	210	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
SW846-6010B											
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
		Bold type indicates detectable concentrations.									
		Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Project #110385

Analytical Data Summary

Type II Well: **MW-13**

Client Sample ID:		GW-236	UST820-MW13-01C3	UST820-MW13-02B	UST820-MW13-02C	UST820-MW13	UST820-MW13	UST820-MW13	UST820-MW13
Date Sampled:		06/21/01	10/02/01	04/26/02	10/29/02	04/08/03	10/09/03	04/14/04	11/06/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 602									
Benzene	1	**40**	**24**	**0.63 J**	<1.0	**0.55 J**	**4.3**	**12.5**	**2.8**
Chlorobenzene	50	<10	<10	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Methyl tert-butyl ether	210	**260**	**350**	**18.3**	**6.7**	**4.4**	<1.0	<10	**1.5**
Ethylbenzene	29	**52**	**110**	**5**	**0.73 J**	**3.9**	**48.4**	**145**	**19.5**
Xylenes (total)	530	**550**	**590**	**24.8**	**7.2**	**103**	**531**	**1290**	**64**
Toluene	1000	**920 B**	**68**	**17.5**	**2.1**	**62.5**	**53.3**	**474**	**19.1**
Total BTEX		**1562**	**792**	**47.93**	**10.03**	**169.95**	**637**	**1922**	**105.0**
EPA 610									
Chrysene	5	<0.10	<0.10	<5.0	<5.4	<5.1	<5.1	<5.2	<4.8
Naphthalene	21	**11**	**6**	<5.0	<5.4	**7.2**	**34.2**	**48.4**	**3.2**
Acenaphthene	80	<1.0	**1 P**	<5.0	<5.4	<5.1	<5.1	<5.2	<4.8
Acenaphthylene	210	<1.0	**3.6**	<5.0	<5.4	<5.1	<5.1	<5.2	<4.8
Benzo(a)anthracene	0.05	<0.10	**0.15 P**	<5.0	<5.4	<5.1	<5.1	<5.2	<4.8
Pyrene	210	<0.10	<0.25	<5.0	<5.4	<5.1	<5.1	<5.2	<4.8
Fluorene	280	<2.0	<2.0	<5.0	<5.4	<5.1	<5.1	<5.2	<4.8
Anthracene	2100	<1.0	<1.0	<5.0	<5.4	<5.1	<5.1	<5.2	<4.8
Fluoranthene	280	<0.20	<0.25	<5.0	<5.4	<5.1	<5.1	<5.2	<4.8
Phenanthrene	210	<1.0	<1.0	<5.0	<5.4	<5.1	<5.1	<5.2	<4.8
SW846-6010B									
Lead	15	NA	NA	NA	NA	NA	NA	NA	<5.0
Bold type indicates detectable concentrations.									
Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type II Well: **MW-14**

Client Sample ID:		GW-237	UST820-MW14-01C3	UST820-MW14-02B	UST820-MW14-02C	UST820-MW14	UST820-MW14	UST820-MW14	UST820-MW14
Date Sampled:		06/22/01	09/27/01	04/26/02	10/30/02	04/18/03	10/17/03	04/15/04	11/20/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 602									
Benzene	1	<1.0	<1.0	**1.2**	<1.0	<1.0	<1.0	<1.0	**0.93 J**
Chlorobenzene	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	210	**2.1 J**	<10	**0.53 J**	<1.0	<1.0	<1.0	<1.0	**2.6**
Ethylbenzene	29	<1.0	<1.0	**7.3**	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (total)	530	<1.0	<2.0	**37.2**	<3.0	<3.0	<3.0	<3.0	<3.0
Toluene	1000	**0.36 J**	<1.0	**89.2**	<1.0	<1.0	<1.0	<1.0	<1.0
Total BTEX		**0.36**		**134.9**					**0.93**
EPA 610									
Chrysene	5	<0.10	<0.10	<5.0	<5.1	<5.1	<5.1	<5.2	<4.8
Naphthalene	21	<2.0	<2.0	**2.9**	<5.1	<5.1	<5.1	<5.2	<4.8
Acenaphthene	80	<1.0	<1.0	<5.0	<5.1	<5.1	<5.1	<5.2	<4.8
Acenaphthylene	210	<1.0	<1.0	<5.0	<5.1	<5.1	<5.1	<5.2	<4.8
Benzo(a)anthracene	0.05	<0.10	<0.10	<5.0	<5.1	<5.1	<5.1	<5.2	<4.8
Pyrene	210	<0.10	<0.25	<5.0	<5.1	<5.1	<5.1	<5.2	<4.8
Fluorene	280	<2.0	<2.0	<5.0	<5.1	<5.1	<5.1	<5.2	<4.8
Anthracene	2100	<1.0	<1.0	<5.0	<5.1	<5.1	<5.1	<5.2	<4.8
Fluoranthene	280	<0.20	<0.25	<5.0	<5.1	<5.1	<5.1	<5.2	<4.8
Phenanthrene	210	<1.0	<1.0	<5.0	<5.1	<5.1	<5.1	<5.2	<4.8
SW846-6010B									
Lead	15	NA	NA	NA	NA	NA	NA	NA	<5.0
Bold type indicates detectable concentrations.									
Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Project #110385

Analytical Data Summary

Type II Well: **MW-15**

Client Sample ID:		GW-235	UST820-MW15-01C3	UST820-MW15-02B	UST820-MW15-02C	UST820-MW15	UST820-MW15	UST820-MW15	UST820-MW15
Date Sampled:		06/26/01	10/01/01	04/26/02	10/28/02	04/08/03	10/17/03	04/13/04	11/06/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 602									
Benzene	1	**1.9**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2.5**
Chlorobenzene	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	210	<5.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Ethylbenzene	29	**0.67 J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**0.65 J**
Xylenes (total)	530	**3.1**	<2.0	<3.0	<3.0	<3.0	<3.0	<3.0	**1.4 J**
Toluene	1000	**3.3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**0.89 J**
Total BTEX		**8.97**							**5.44**
EPA 610									
Chrysene	5	<0.10	<0.10	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Naphthalene	21	<2.0	<2.0	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Acenaphthene	80	<1.0	<1.0	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Acenaphthylene	210	<1.0	<1.0	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Benzo(a)anthracene	0.05	<0.10	<0.10	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Pyrene	210	<0.10	<0.25	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Fluorene	280	<2.0	<2.0	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Anthracene	2100	<1.0	<1.0	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Fluoranthene	280	<0.20	<0.25	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
Phenanthrene	210	<1.0	<1.0	<5.0	<5.2	<5.1	<5.1	<5.2	<4.8
SW846-6010B									
Lead	15	NA	NA	NA	NA	NA	NA	NA	<5.0
Bold type indicates detectable concentrations.									
Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Samples analyzed by Compuchem, STL, or Accutest

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Project #110385

Analytical Data Summary

Type II Well: **MW-16**

Client Sample ID:		GW-234	UST820-MW16-01C3	UST820-MW16-02B	UST820-MW16-02C	UST820-MW16	UST820-MW16	UST820-MW16	UST820-MW16
Date Sampled:		06/22/01	09/27/01	04/25/02	10/29/02	04/18/03	10/07/03	04/15/04	11/20/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 602									
Benzene	1	**8.2**	<1.0	<1.0	<1.0	<1.0	<1.0	**2.4**	**2.6**
Chlorobenzene	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	210	**1.8 J**	<10	<1.0	<1.0	<1.0	<1.0	<1.0	**0.60 J**
Ethylbenzene	29	**2.3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (total)	530	**9.6**	<2.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Toluene	1000	**12 B**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total BTEX		**32.1**						**2.4**	**2.6**
EPA 610									
Chrysene	5	<2.5	<0.10	<5.5	<5.1	<5.1	<5.2	<5.3	<4.8
Naphthalene	21	<50	<2.0	<5.5	<5.1	<5.1	<5.2	<5.3	<4.8
Acenaphthene	80	<25	**2.4**	<5.5	<5.1	<5.1	<5.2	<5.3	<4.8
Acenaphthylene	210	<25	**4**	<5.5	<5.1	<5.1	<5.2	<5.3	<4.8
Benzo(a)anthracene	0.05	<2.5	<0.10	<5.5	<5.1	<5.1	<5.2	<5.3	<4.8
Pyrene	210	<2.5	<0.25	<5.5	<5.1	<5.1	<5.2	<5.3	<4.8
Fluorene	280	<50	<2.0	<5.5	<5.1	<5.1	<5.2	<5.3	<4.8
Anthracene	2100	<25	<1.0	<5.5	<5.1	<5.1	<5.2	<5.3	<4.8
Fluoranthene	280	<5	<0.25	<5.5	<5.1	<5.1	<5.2	<5.3	<4.8
Phenanthrene	210	<25	**1.3**	<5.5	<5.1	<5.1	<5.2	<5.3	<4.8
SW846-6010B									
Lead	15	NA	NA	NA	NA	NA	NA	NA	<5.0
Bold type indicates detectable concentrations.									
Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

Printed: 3/23/2005
Samples analyzed by Compuchem, STL, or Accutest

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Project #110385

Analytical Data Summary

Type III Well: **MW-17**

Client Sample ID:		GW-240	UST820-MW17-01C3	UST820-MW17-02B	UST820-MW17-02C	UST820-MW17	UST820-MW17	UST820-MW17	UST820-MW17
Date Sampled:		06/22/01	09/27/01	04/25/02	10/29/02	04/18/03	10/07/03	04/15/04	11/20/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 602									
Benzene	1	**19**	**18**	**17.4**	<1.0	**45.8**	**364**	**181**	**242.0**
Chlorobenzene	50	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Methyl tert-butyl ether	210	**56**	<2.0	**61**	**12.4**	**148**	**1860**	**1500**	**1760.0**
Ethylbenzene	29	**2.2**	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Xylenes (total)	530	**10**	<4.0	<3.0	<3.0	**1.9 J**	**3.3**	<30	**2.3 J**
Toluene	1000	**12 B**	<2.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0
Total BTEX		**43.2**	**18**	**17.4**		**47.7**	**367.3**	**181**	**244.30**
EPA 610									
Chrysene	5	<0.10	<0.10	<5.5	<5.1	<5.1	<5.2	<5.1	<4.8
Naphthalene	21	<2.0	<2.0	<5.5	<5.1	<5.1	<5.2	<5.1	<4.8
Acenaphthene	80	<1.0	<1.0	<5.5	<5.1	<5.1	<5.2	<5.1	<4.8
Acenaphthylene	210	<1.0	<1.0	<5.5	<5.1	<5.1	<5.2	<5.1	<4.8
Benzo(a)anthracene	0.05	<0.10	<0.10	<5.5	<5.1	<5.1	<5.2	<5.1	<4.8
Pyrene	210	<0.10	<0.25	<5.5	<5.1	<5.1	<5.2	<5.1	<4.8
Fluorene	280	<2.0	<2.0	<5.5	<5.1	<5.1	<5.2	<5.1	<4.8
Anthracene	2100	<1.0	<1.0	<5.5	<5.1	<5.1	<5.2	<5.1	<4.8
Fluoranthene	280	<0.20	<0.25	<5.5	<5.1	<5.1	<5.2	<5.1	<4.8
Phenanthrene	210	<1.0	<1.0	<5.5	<5.1	<5.1	<5.2	<5.1	<4.8
SW846-6010B									
Lead	15	NA	NA	NA	NA	NA	NA	NA	<15.0
Bold type indicates detectable concentrations.									
Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

Printed: 3/23/2005
Samples analyzed by Compuchem, STL, or Accutest

CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type II Well: **MW-18**

Client Sample ID:		UST820-MW18					
Date Sampled:		11/20/04					
Analyte (ug/l)	**Action Level**	**Result**					
EPA 602							
Benzene	1	<1.0					
Chlorobenzene	50	<1.0					
Methyl tert-butyl ether	210	<1.0					
Ethylbenzene	29	<1.0					
Xylenes (total)	530	<3.0					
Toluene	1000	<1.0					
Total BTEX		**0**					
EPA 610							
Chrysene	5	<4.9					
Naphthalene	21	<4.9					
Acenaphthene	80	<4.9					
Acenaphthylene	210	<4.9					
Benzo(a)anthracene	0.05	<4.9					
Pyrene	210	<4.9					
Fluorene	280	<4.9					
Anthracene	2100	<4.9					
Fluoranthene	280	<4.9					
Phenanthrene	210	<4.9					
SW846-6010B							
Lead	15	<5.0					
Bold type indicates detectable concentrations.							
Shaded area indicates detectable concentrations above the groundwater quality standards.							

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Project #110385

Analytical Data Summary

Type III Well: **MW-19**

Client Sample ID:		GW-229	UST820-MW19-01C3	UST820-MW19-02B	UST820-MW19-02C	UST820-MW19	UST820-MW19	UST820-MW19	UST820-MW19
Date Sampled:		06/22/01	09/26/01	04/24/02	10/30/02	04/14/03	10/07/03	04/16/04	11/20/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 602									
Benzene	1	**1.5**	<1.0	**1.4**	<1.0	**0.87 J**	**0.76 J**	**0.79 J**	**0.57 J**
Chlorobenzene	50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	210	**12**	<10	**8.2**	**5.1**	**4.4**	**3.0**	**4.5**	4.7
Ethylbenzene	29	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
Xylenes (total)	530	**0.56 J**	<2.0	<3.0	<3.0	<3.0	<3.0	**1.8 J**	<1.0
Toluene	1000	**0.66 J**	<1.0	**0.75 J**	<1.0	<1.0	<1.0	**1.3**	<1.0
Total BTEX		**2.72**		**2.15**		**0.87**	**0.76**	**3.89**	**0.57**
EPA 610									
Chrysene	5	<0.10	<0.10	<5.5	<5.3	<5.1	<5.4	<5.3	<4.8
Naphthalene	21	<2.0	<2.0	<5.5	<5.3	<5.1	<5.4	<5.3	<4.8
Acenaphthene	80	<1.0	<1.0	<5.5	<5.3	<5.1	<5.4	<5.3	<4.8
Acenaphthylene	210	<1.0	<1.0	<5.5	<5.3	<5.1	<5.4	<5.3	<4.8
Benzo(a)anthracene	0.05	<0.10	<0.10	<5.5	<5.3	<5.1	<5.4	<5.3	<4.8
Pyrene	210	<0.10	<0.25	<5.5	<5.3	<5.1	<5.4	<5.3	<4.8
Fluorene	280	<2.0	<2.0	<5.5	<5.3	<5.1	<5.4	<5.3	<4.8
Anthracene	2100	<1.0	<1.0	<5.5	<5.3	<5.1	<5.4	<5.3	<4.8
Fluoranthene	280	<0.20	<0.25	<5.5	<5.3	<5.1	<5.4	<5.3	<4.8
Phenanthrene	210	<1.0	<1.0	<5.5	<5.3	<5.1	<5.4	<5.3	<4.8
SW846-6010B									
Lead	15	NA	NA	NA	NA	NA	NA	NA	<5.0
Bold type indicates detectable concentrations.									
Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Project #110385

Analytical Data Summary

Type II Well: **MW-20**

Client Sample ID:		UST820-MW20					
Date Sampled:		11/20/04					
Analyte (ug/l)	**Action Level**	**Result**					
EPA 602							
Benzene	1	<1.0					
Chlorobenzene	50	<1.0					
Methyl tert-butyl ether	210	<1.0					
Ethylbenzene	29	<1.0					
Xylenes (total)	530	<3.0					
Toluene	1000	<1.0					
Total BTEX		**0**					
EPA 610							
Chrysene	5	<4.8					
Naphthalene	21	<4.8					
Acenaphthene	80	<4.8					
Acenaphthylene	210	<4.8					
Benzo(a)anthracene	0.05	<4.8					
Pyrene	210	<4.8					
Fluorene	280	<4.8					
Anthracene	2100	<4.8					
Fluoranthene	280	<4.8					
Phenanthrene	210	<4.8					
SW846-6010B							
Lead	15	<5.0					
Bold type indicates detectable concentrations.							
Shaded area indicates detectable concentrations above the groundwater quality standards.							

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Analytical Data Summary

Type III Well: **MW-21**

Client Sample ID:		143GW026	143GW052	143GW082	143GW114		143GW138	143GW149	143GW159	143GW171	143GW195	143GW203
Date Sampled:		08/19/97	02/11/98	05/12/98	08/15/98	11/17/98	02/27/99	05/18/99	09/10/99	11/17/99	05/18/00	08/29/00
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601												
1,2-Dichlorobenzene	620	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
1,3-Dichlorobenzene	620	<0.8	<0.8	<0.8	<0.8	<1	<1	<1	<1	<1	<1	<2
1,4-Dichlorobenzene	75	<1.5	<1.5	<1.5	**0.56 JB**	**0.44 J**	<1	<1	<1	<1	<1	<2
Dibromochloromethane	0.41	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
Chloroform	0.19	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
Chloromethane	2.6	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
1,2-Dichloroethane	0.38	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
EPA 602												
Benzene	1	<0.5	<0.5	<0.5	**0.49 J**	<1	**3.8**	**50.4**	**2.2**	**1.9**	<1	<1
Chlorobenzene	50	<0.5	**0.085 J**	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<2
Methyl tert-butyl ether	210	<5	**1.3 J**	<5	<5	**8.3**	**0.86 J**	**3.6**	<1	<1	<1	<2
Ethylbenzene	29	<0.8	<0.8	**0.42 J**	**0.29 J**	<1	<1	**8.8**	**4.5**	**5.5**	<1	<2
Xylenes (total)	530	<3	**0.51 JB**	**1.48 J**	**0.95 J**	<3	<3	**20**	**44**	**24.9**	<3	<6
Toluene	1000	<2	**0.23 JB**	**1.9 J**	<2	<1	**1.4**	**26**	**36.7**	**10.8**	<1	<2
Total BTEX			**0.74**	**3.8**	**1.73**		**5.2**	**105.2**	**87.4**	**43.1**		
EPA 610												
Chrysene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	2100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SW846-6010B												
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Bold type indicates detectable concentrations.										
		Shaded area indicates detectable concentrations above the groundwater quality standards.										

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Analytical Data Summary

Type III Well: **MW-21**

Client Sample ID:		143GW214	CL-143-GW-225	GW-225	UST820-MW21-01C3	UST820-MW21-02B	UST820-MW21-02C	UST820-MW21	UST820-MW21	UST820-MW21	UST820-MW21
Date Sampled:		12/13/00	03/19/01	06/22/01	09/26/01	04/24/02	10/30/02	04/14/03	10/07/03	04/16/04	11/20/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601											
1,2-Dichlorobenzene	620	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	620	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	0.41	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	0.19	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane	2.6	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	0.38	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
EPA 602											
Benzene	1	<1	**0.17 J**	**0.19 J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzene	50	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	210	<5	**2 J**	<5.0	<10	<1.0	<1.0	<1.0	<1.0	**0.51 J**	**0.084**
Ethylbenzene	29	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (total)	530	<1	<1	**0.55 J**	<2.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
Toluene	1000	<1	**0.24 J**	**0.56 J**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Total BTEX			**0.41**	**1.3**							**0**
EPA 610											
Chrysene	5	NA	NA	<0.10	<0.10	<5.5	<5.0	<5.1	<5.6	<5.2	<4.8
Naphthalene	21	NA	NA	<2.0	<2.0	<5.5	<5.0	<5.1	<5.6	<5.2	<4.8
Acenaphthene	80	NA	NA	<1.0	<1.0	<5.5	<5.0	<5.1	<5.6	<5.2	<4.8
Acenaphthylene	210	NA	NA	<1.0	<1.0	<5.5	<5.0	<5.1	<5.6	<5.2	<4.8
Benzo(a)anthracene	0.05	NA	NA	<0.10	<0.10	<5.5	<5.0	<5.1	<5.6	<5.2	<4.8
Pyrene	210	NA	NA	<0.10	<0.25	<5.5	<5.0	<5.1	<5.6	<5.2	<4.8
Fluorene	280	NA	NA	<2.0	<2.0	<5.5	<5.0	<5.1	<5.6	<5.2	<4.8
Anthracene	2100	NA	NA	<1.0	<1.0	<5.5	<5.0	<5.1	<5.6	<5.2	<4.8
Fluoranthene	280	NA	NA	<0.20	<0.25	<5.5	<5.0	<5.1	<5.6	<5.2	<4.8
Phenanthrene	210	NA	NA	<1.0	<1.0	<5.5	<5.0	<5.1	<5.6	<5.2	<4.8
SW846-6010B											
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.0
		Bold type indicates detectable concentrations.									
		Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Project #110385

Analytical Data Summary

Type II Well: **MW-22**

Client Sample ID:		UST820-MW22					
Date Sampled:		11/30/04					
Analyte (ug/l)	**Action Level**	**Result**					
EPA 602							
Benzene	1	<1.0					
Chlorobenzene	50	<1.0					
Methyl tert-butyl ether	210	<1.0					
Ethylbenzene	29	<1.0					
Xylenes (total)	530	<3.0					
Toluene	1000	<1.0					
Total BTEX		**0**					
EPA 610							
Chrysene	5	<4.8					
Naphthalene	21	<4.8					
Acenaphthene	80	<4.8					
Acenaphthylene	210	<4.8					
Benzo(a)anthracene	0.05	<4.8					
Pyrene	210	<4.8					
Fluorene	280	<4.8					
Anthracene	2100	<4.8					
Fluoranthene	280	<4.8					
Phenanthrene	210	<4.8					
SW846-6010B							
Lead	15	<5.0					
Bold type indicates detectable concentrations.							
Shaded area indicates detectable concentrations above the groundwater quality standards.							

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Project #110385

Analytical Data Summary

Type II Well: **MW-23**

Client Sample ID:		UST820-MW23					
Date Sampled:		11/30/04					
Analyte (ug/l)	**Action Level**	**Result**					
EPA 602							
Benzene	1	<1.0					
Chlorobenzene	50	<1.0					
Methyl tert-butyl ether	210	<1.0					
Ethylbenzene	29	<1.0					
Xylenes (total)	530	<3.0					
Toluene	1000	<1.0					
Total BTEX		**0**					
EPA 610							
Chrysene	5	<4.8					
Naphthalene	21	<4.8					
Acenaphthene	80	<4.8					
Acenaphthylene	210	<4.8					
Benzo(a)anthracene	0.05	<4.8					
Pyrene	210	<4.8					
Fluorene	280	<4.8					
Anthracene	2100	<4.8					
Fluoranthene	280	<4.8					
Phenanthrene	210	<4.8					
SW846-6010B							
Lead	15	**5.4**					
Bold type indicates detectable concentrations.							
Shaded area indicates detectable concentrations above the groundwater quality standards.							

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type II Well: **MW-24**

Client Sample ID:		UST820-MW24					
Date Sampled:		11/30/04					
Analyte (ug/l)	**Action Level**	**Result**					
EPA 602							
Benzene	1	<1.0					
Chlorobenzene	50	<1.0					
Methyl tert-butyl ether	210	<1.0					
Ethylbenzene	29	<1.0					
Xylenes (total)	530	<3.0					
Toluene	1000	<1.0					
Total BTEX		**0**					
EPA 610							
Chrysene	5	<4.8					
Naphthalene	21	<4.8					
Acenaphthene	80	<4.8					
Acenaphthylene	210	<4.8					
Benzo(a)anthracene	0.05	<4.8					
Pyrene	210	<4.8					
Fluorene	280	<4.8					
Anthracene	2100	<4.8					
Fluoranthene	280	<4.8					
Phenanthrene	210	<4.8					
SW846-6010B							
Lead	15	**5.2**					
Bold type indicates detectable concentrations.							
Shaded area indicates detectable concentrations above the groundwater quality standards.							

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

Printed: 3/23/2005
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CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type II Well: **MW-25**

Client Sample ID:		UST820-MW25					
Date Sampled:		11/30/04					
Analyte (ug/l)	**Action Level**	**Result**					
EPA 602							
Benzene	1	<1.0					
Chlorobenzene	50	<1.0					
Methyl tert-butyl ether	210	**1.5**					
Ethylbenzene	29	<1.0					
Xylenes (total)	530	<3.0					
Toluene	1000	<1.0					
Total BTEX		**0**					
EPA 610							
Chrysene	5	<4.8					
Naphthalene	21	<4.8					
Acenaphthene	80	<4.8					
Acenaphthylene	210	<4.8					
Benzo(a)anthracene	0.05	<4.8					
Pyrene	210	<4.8					
Fluorene	280	<4.8					
Anthracene	2100	<4.8					
Fluoranthene	280	<4.8					
Phenanthrene	210	<4.8					
SW846-6010B							
Lead	15	<5.0					
Bold type indicates detectable concentrations.							
Shaded area indicates detectable concentrations above the groundwater quality standards.							

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

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Analytical Data Summary

Type II Well: **MW-26**

Client Sample ID:		143GW022	143GW049	143GW083	143GW115		143GW141	143GW152	143GW162	143GW180	143GW198	143GW208
Date Sampled:		08/19/97	02/11/98	05/12/98	08/15/98	11/17/98	02/27/99	05/18/99	09/10/99	11/17/99	05/18/00	08/29/00
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601												
1,2-Dichlorobenzene	620	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
1,3-Dichlorobenzene	620	<0.8	**0.05 JP**	<0.8	<0.8	<1	<1	<1	<1	<1	<1	<2
1,4-Dichlorobenzene	75	**0.29 J**	<1.5	<1.5	**0.54 JB**	**0.3 J**	<1	<1	<1	<1	<1	<2
Dibromochloromethane	0.41	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
Chloroform	0.19	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
Chloromethane	2.6	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
1,2-Dichloroethane	0.38	NA	NA	NA	NA	NA	<1	<1	<1	<1	<1	<2
EPA 602												
Benzene	1	<0.5	**0.092 JP**	<0.5	**0.1 J**	<1	**14.7**	**21**	**166**	**15.4**	<1	**49.6**
Chlorobenzene	50	<0.5	**0.039 JP**	<0.5	<0.5	<1	<1	<1	<1	<1	<1	<2
Methyl tert-butyl ether	210	**0.72 JP**	**6.4**	<5	**6.3**	**7.4**	**67.4**	**65.4**	**99**	**76.6**	**132**	**92**
Ethylbenzene	29	**0.32 JP**	**0.08 JB**	<0.8	<0.8	<1	**7.8**	**16.9**	**23**	**19.5**	<1	**8.5**
Xylenes (total)	530	**1.62 JP**	**0.6 JB**	**0.196 JB**	<3	<3	**39**	**91**	**80.7**	**127**	<3	**18**
Toluene	1000	**1.2 JP**	**0.22 JBP**	**0.3 JB**	<2	<1	**66.4**	**159**	**91.7**	**83.2**	<1	**27.7**
Total BTEX		**3.14**	**0.992**	**0.496**	**0.1**		**127.9**	**287.9**	**361.4**	**245.1**		**103.8**
EPA 610												
Chrysene	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	21	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	80	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	2100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SW846-6010B												
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		Bold type indicates detectable concentrations.										
		Shaded area indicates detectable concentrations above the groundwater quality standards.										

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

Printed: 3/23/2005
Samples analyzed by Compuchem, STL, or Accutest

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Analytical Data Summary

Type II Well: **MW-26**

Client Sample ID:		143GW219	CL-143-GW-230	GW-230	UST820-MW26-01C3	UST820-MW26-02B	UST820-MW26-02C	UST820-MW26	UST820-MW26	UST820-MW26	UST820-MW26
Date Sampled:		12/13/00	03/19/01	06/22/01	10/02/01	04/26/02	10/29/02	04/18/03	10/17/03	04/20/04	11/20/04
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**
EPA 601											
1,2-Dichlorobenzene	620	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	620	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	75	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	0.41	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	0.19	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
Chloromethane	2.6	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	0.38	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA
EPA 602											
Benzene	1	**30**	**42**	<1.0	**2.6**	<1.0	<1.0	<1.0	<1.0	<1.0	**1.0**
Chlorobenzene	50	<1	<1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	210	**31**	**20**	**7.1**	**10**	**28.5**	**14.8**	**0.54 J**	<1.0	<1.0	**4.3**
Ethylbenzene	29	**5**	**7.4**	<1.0	**3.2**	**3.1**	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes (total)	530	**11**	**19**	<1.0	**18**	**16.7**	<3.0	**2.1 J**	<3.0	<3.0	<3.0
Toluene	1000	**17**	**28**	**0.3 J**	**14**	**30.2**	<1.0	**0.87 J**	<1.0	<1.0	<1.0
Total BTEX		**63**	**96.4**	**0.3**	**37.8**	**50**		**2.97**			**1.0**
EPA 610											
Chrysene	5	NA	NA	<0.10	<0.10	<5.0	<5.2	<5.1	<5.0	<5.6	<4.8
Naphthalene	21	NA	NA	<2.0	<2.0	<5.0	<5.2	<5.1	<5.0	<5.6	<4.8
Acenaphthene	80	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.1	<5.0	<5.6	<4.8
Acenaphthylene	210	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.1	<5.0	<5.6	<4.8
Benzo(a)anthracene	0.05	NA	NA	<0.10	<0.10	<5.0	<5.2	<5.1	<5.0	<5.6	<4.8
Pyrene	210	NA	NA	<0.10	<0.25	<5.0	<5.2	<5.1	<5.0	<5.6	<4.8
Fluorene	280	NA	NA	<2.0	<2.0	<5.0	<5.2	<5.1	<5.0	<5.6	<4.8
Anthracene	2100	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.1	<5.0	<5.6	<4.8
Fluoranthene	280	NA	NA	<0.20	<0.25	<5.0	<5.2	<5.1	<5.0	<5.6	<4.8
Phenanthrene	210	NA	NA	<1.0	<1.0	<5.0	<5.2	<5.1	<5.0	<5.6	<4.8
SW846-6010B											
Lead	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	**11.0**
		Bold type indicates detectable concentrations.									
		Shaded area indicates detectable concentrations above the groundwater quality standards.									

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

Printed: 3/23/2005
Samples analyzed by Compuchem, STL, or Accutest

CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type II Well: **MW-27**

Client Sample ID:		UST820-MW27-01C3	Well Dry	Well Dry	UST820-MW27	UST820-MW27	UST820-MW27	UST820-MW27		
Date Sampled:		10/03/01	04/25/02	10/28/02	04/09/03	10/09/03	04/13/04	11/22/04		
Analyte (ug/l)	**Action Level**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**	**Result**		
EPA 602										
Benzene	1	<1.0			<2.0	<1.0	<1.0	<1.0		
Chlorobenzene	50	<1.0			<2.0	<1.0	<1.0	<1.0		
Methyl tert-butyl ether	210	<10			**139**	**1.5**	**1.2**	<1.0		
Ethylbenzene	29	<1.0			<2.0	<1.0	<1.0	<1.0		
Xylenes (total)	530	<2.0			<6.0	<3.0	**3.3**	**1.4 J**		
Toluene	1000	<1.0			<2.0	<1.0	**0.65 J**	<1.0		
Total BTEX							**3.95**	**1.4**		
EPA 610										
Chrysene	5	<0.10			<5.2	<5.2	<5.5	<4.8		
Naphthalene	21	<2.0			<5.2	<5.2	<5.5	<4.8		
Acenaphthene	80	<1.0			<5.2	<5.2	<5.5	<4.8		
Acenaphthylene	210	<1.0			<5.2	<5.2	<5.5	<4.8		
Benzo(a)anthracene	0.05	<0.10			<5.2	<5.2	<5.5	<4.8		
Pyrene	210	<0.25			<5.2	<5.2	<5.5	<4.8		
Fluorene	280	<2.0			<5.2	<5.2	**10**	<4.8		
Anthracene	2100	<1.0			<5.2	<5.2	<5.5	<4.8		
Fluoranthene	280	<0.25			<5.2	<5.2	<5.5	<4.8		
Phenanthrene	210	<1.0			<5.2	<5.2	<5.5	<4.8		
SW846-6010B										
Lead	15	N/A			N/A	N/A	N/A	6.0		
		Bold type indicates detectable concentrations.								
		Shaded area indicates detectable concentrations above the groundwater quality standards.								

J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

Printed: 3/23/2005
Samples analyzed by Compuchem, STL, or Accutest

CLJ - POL Berkeley Manor
Project #110385

Analytical Data Summary

Type II Well: **PW-01**

Client Sample ID:		UST820-PW01
Date Sampled:		11/22/04
Analyte (ug/l)	**Action Level**	**Result**
EPA 602		
Benzene	1	**109.0**
Chlorobenzene	50	<1.0
Methyl tert-butyl ether	210	**11.6**
Ethylbenzene	29	**78.2**
Xylenes (total)	530	**333**
Toluene	1000	**48.3**
Total BTEX		**568.5**
EPA 610		
Chrysene	5	<4.8
Naphthalene	21	**10.8**
Acenaphthene	80	<4.8
Acenaphthylene	210	<4.8
Benzo(a)anthracene	0.05	<4.8
Pyrene	210	<4.8
Fluorene	280	<4.8
Anthracene	2100	<4.8
Fluoranthene	280	<4.8
Phenanthrene	210	<4.8
SW846-6010B		
Lead	15	<5.0

Bold type indicates detectable concentrations.

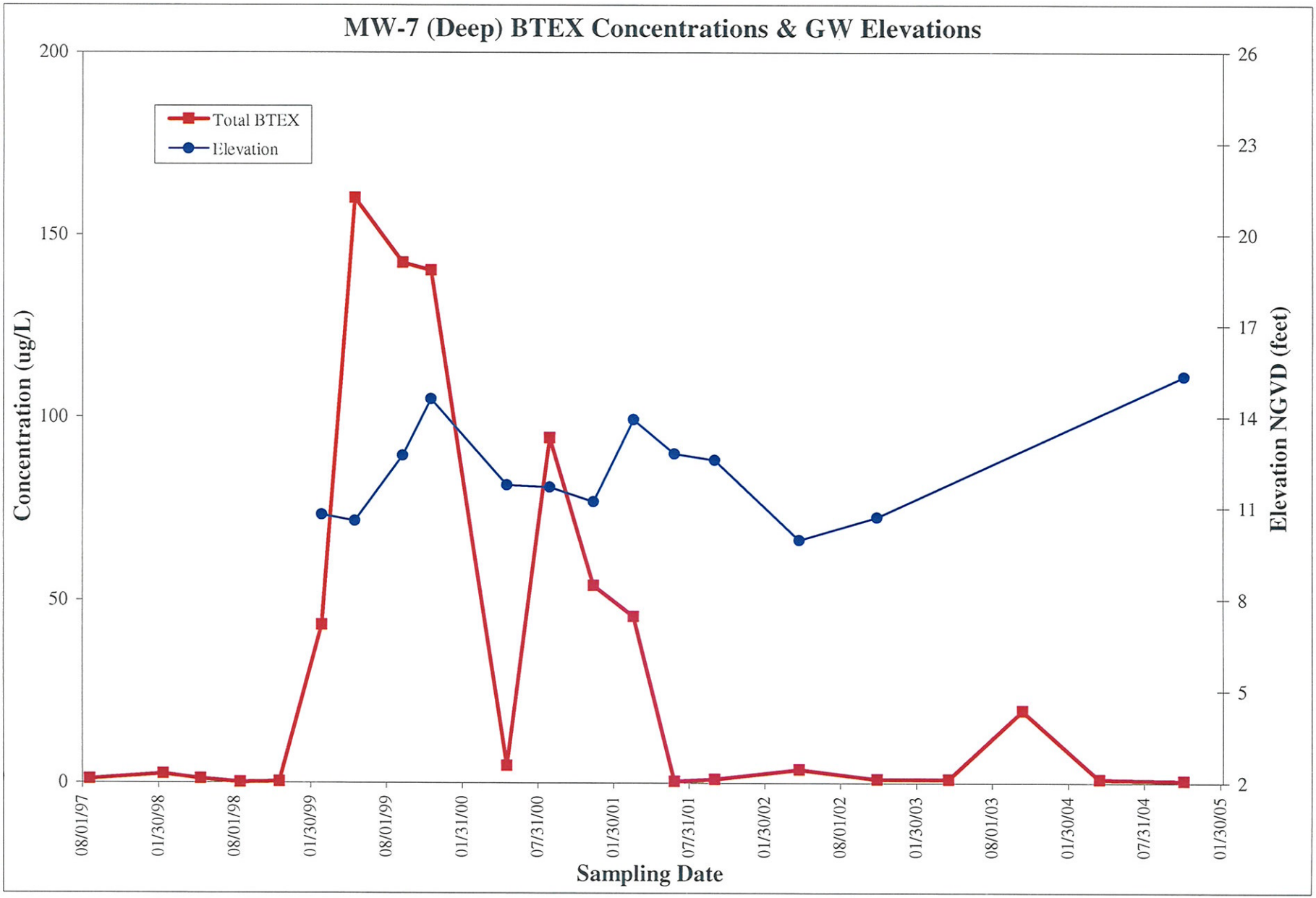
Shaded area indicates detectable concentrations above the groundwater quality standards.

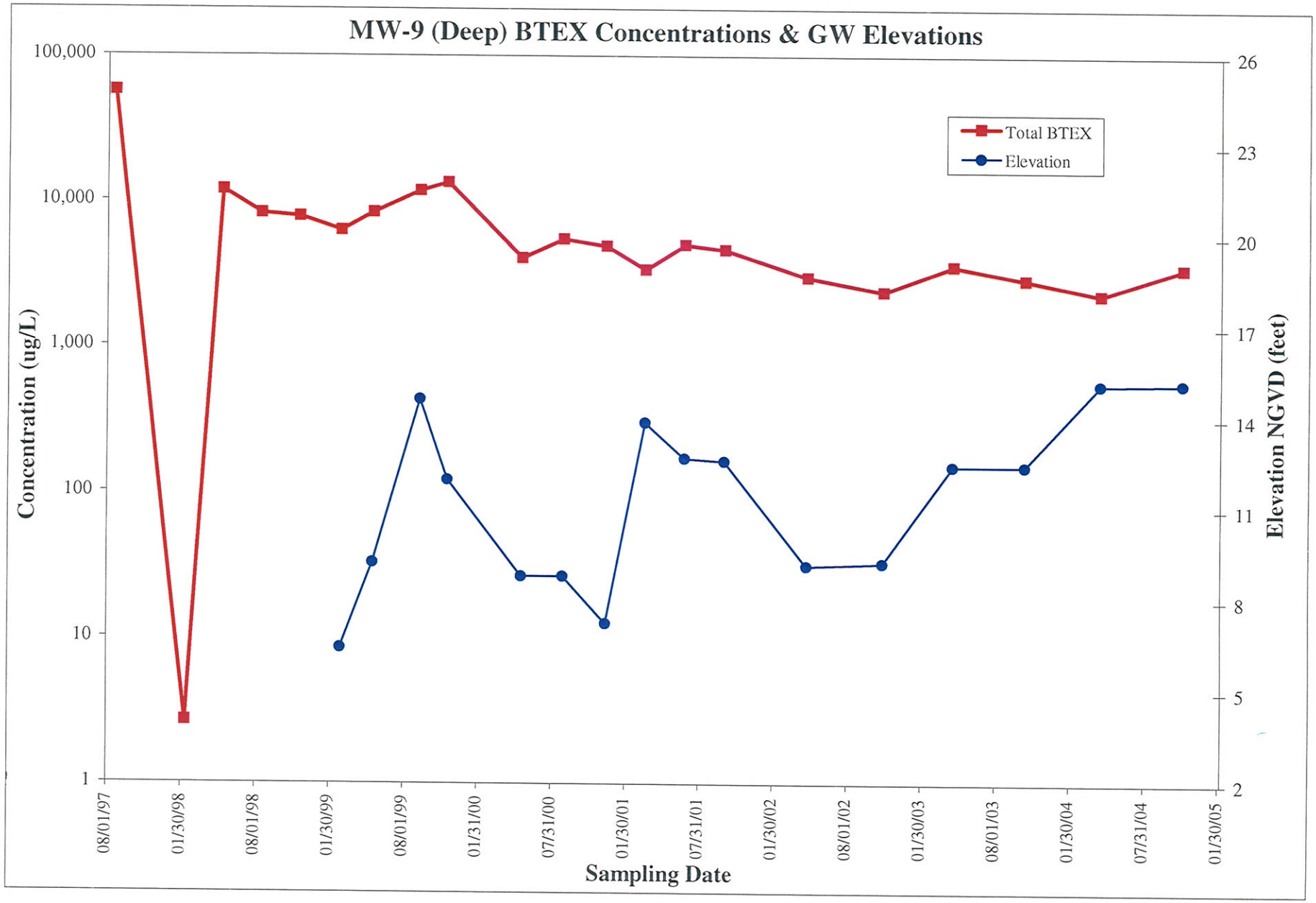
J= estimated
P= >25% difference between column quantitation
B= detected in blank
NA= not analyzed

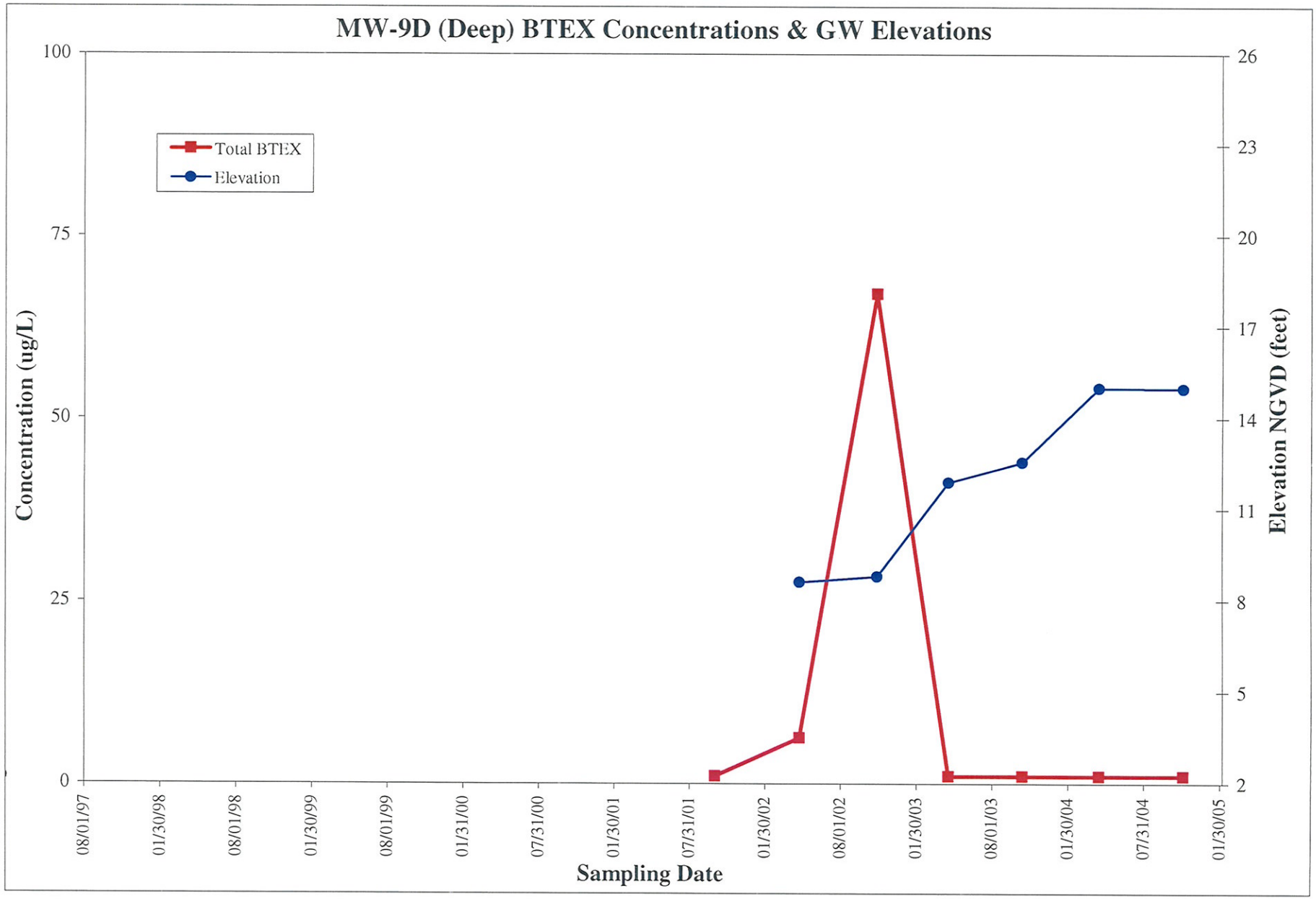
Printed: 3/23/2005
Samples analyzed by Compuchem, STL, or Accutest

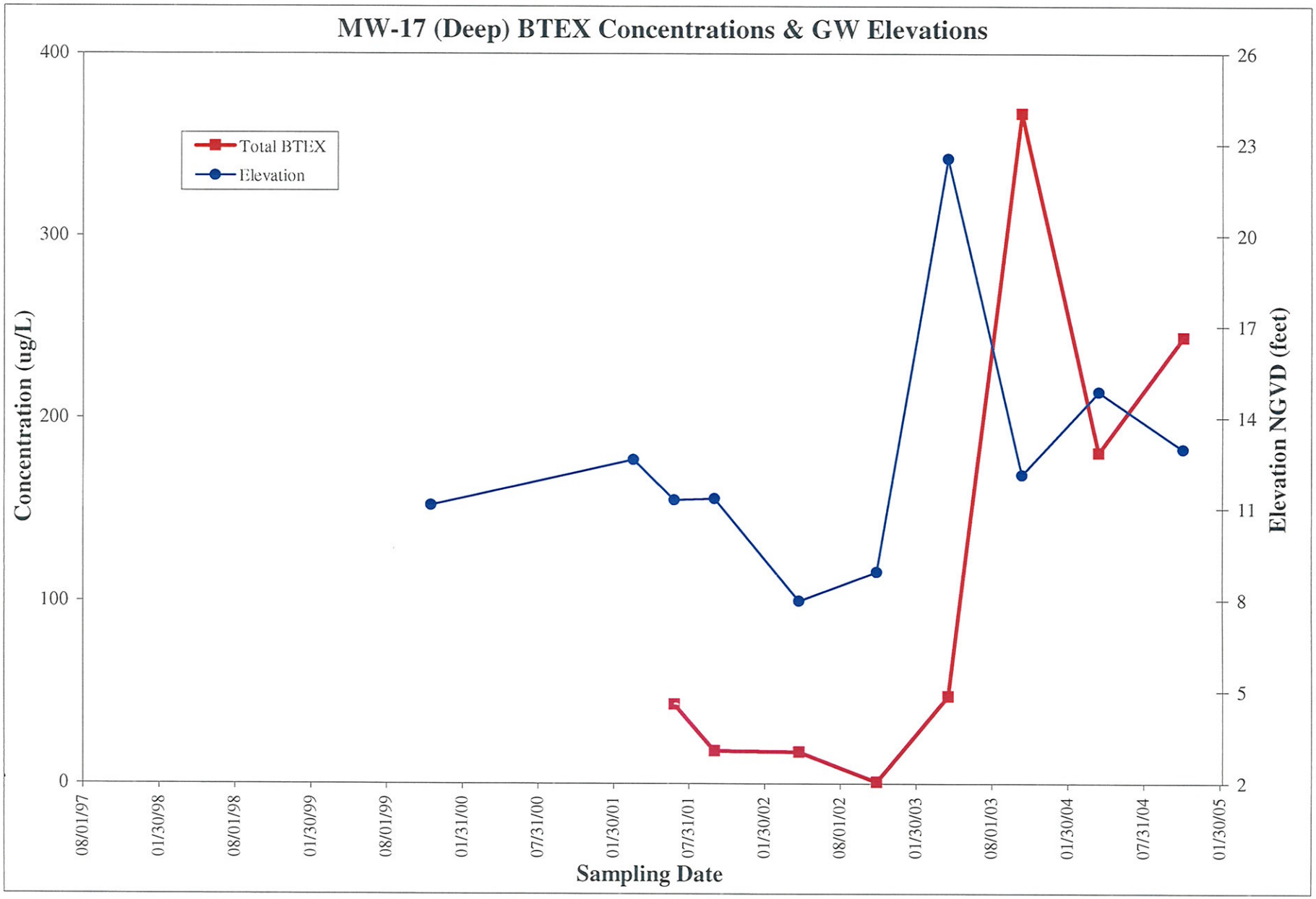
APPENDIX F

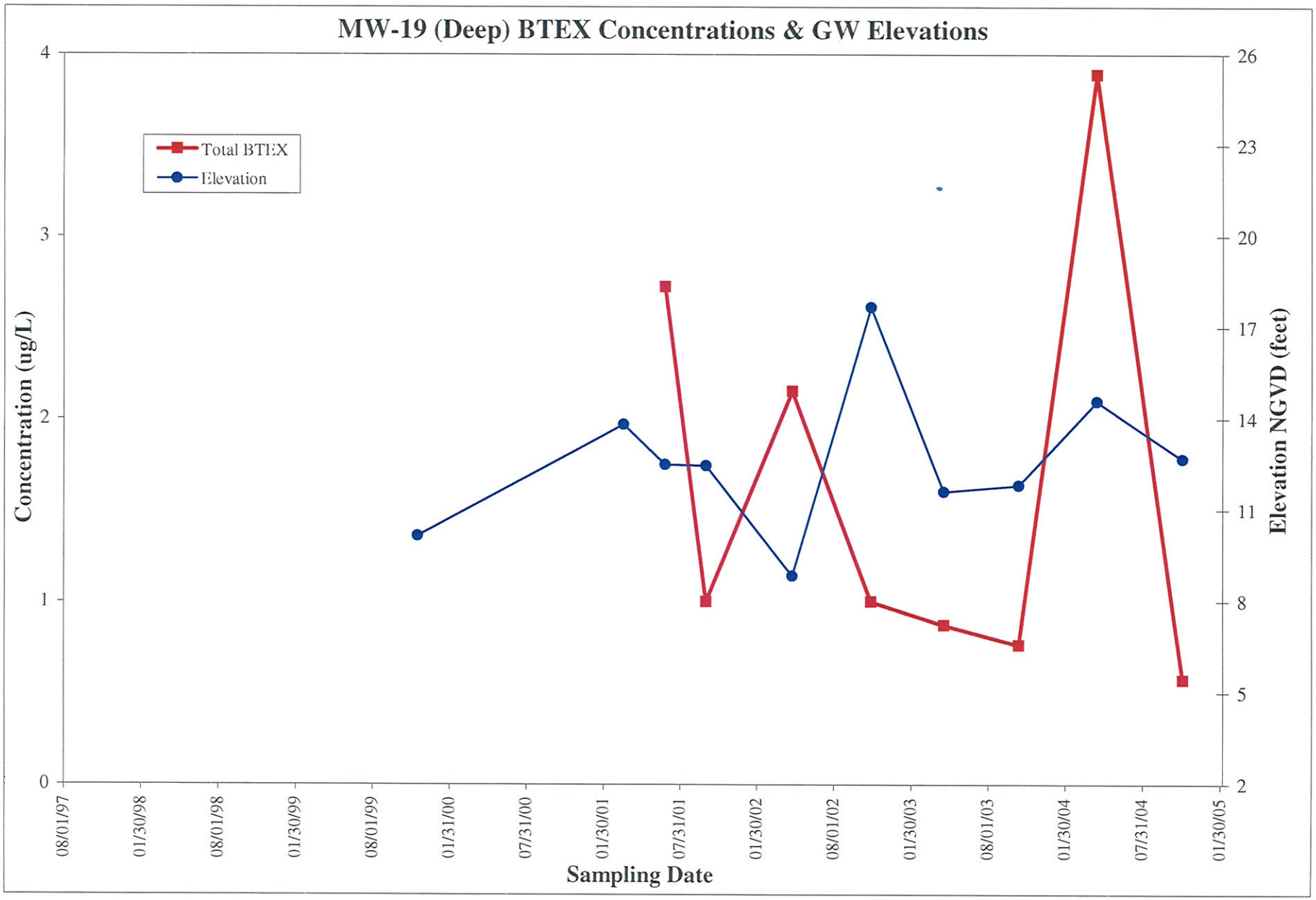
GROUNDWATER ELEVATION vs. BTEX CONCENTRATION GRAPHS

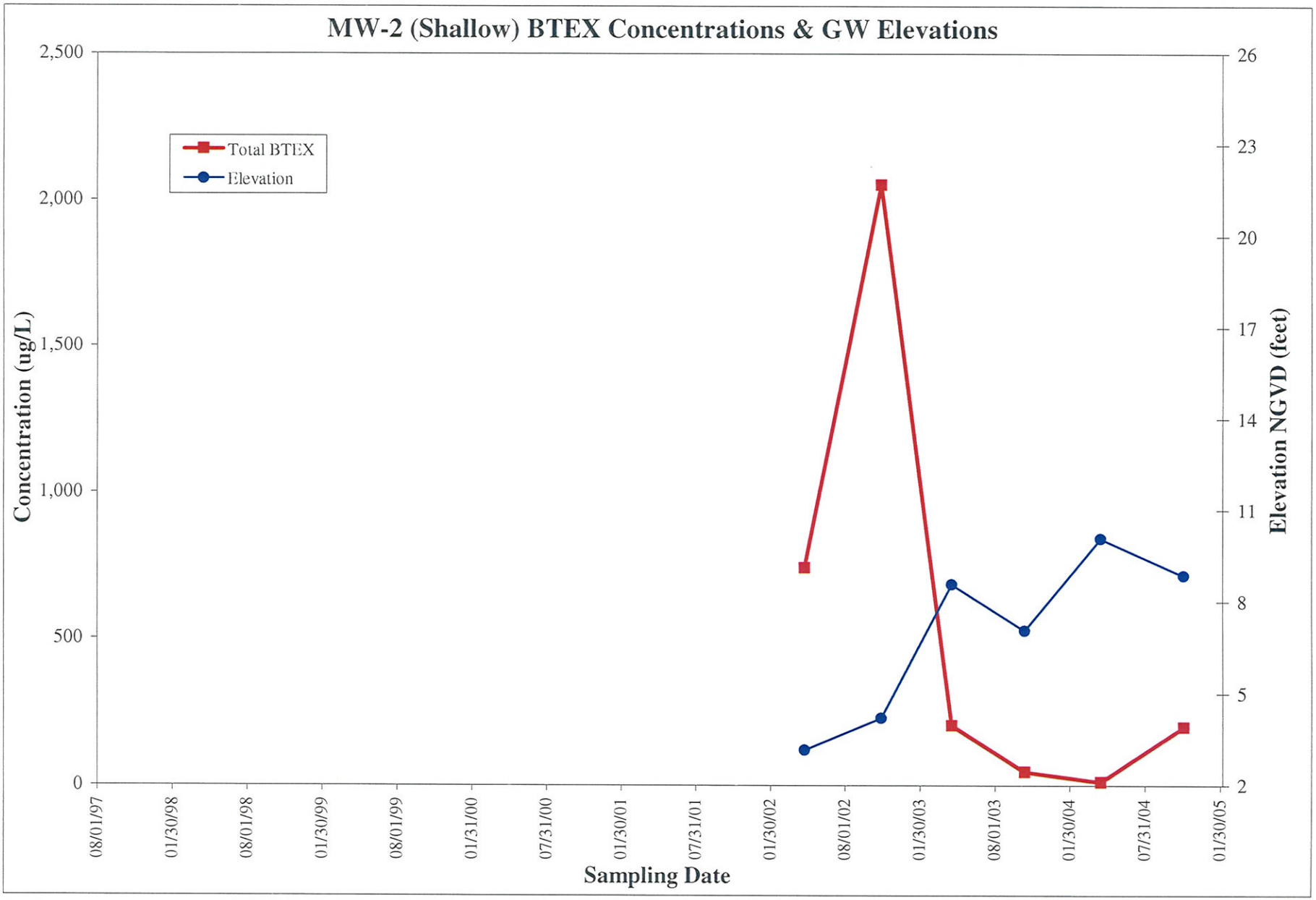

MW-7 (Deep) BTEX Concentrations & GW Elevations
Total BTEX
Elevation
Concentration (ug/L)
Elevation NGVD (feet)
Sampling Date
200
150
100
50
0
26
23
20
17
14
11
8
5
2
08/01/97
01/30/98
08/01/98
01/30/99
08/01/99
01/31/00
07/31/00
01/30/01
07/31/01
01/30/02
08/01/02
01/30/03
08/01/03
01/30/04
07/31/04
01/30/05

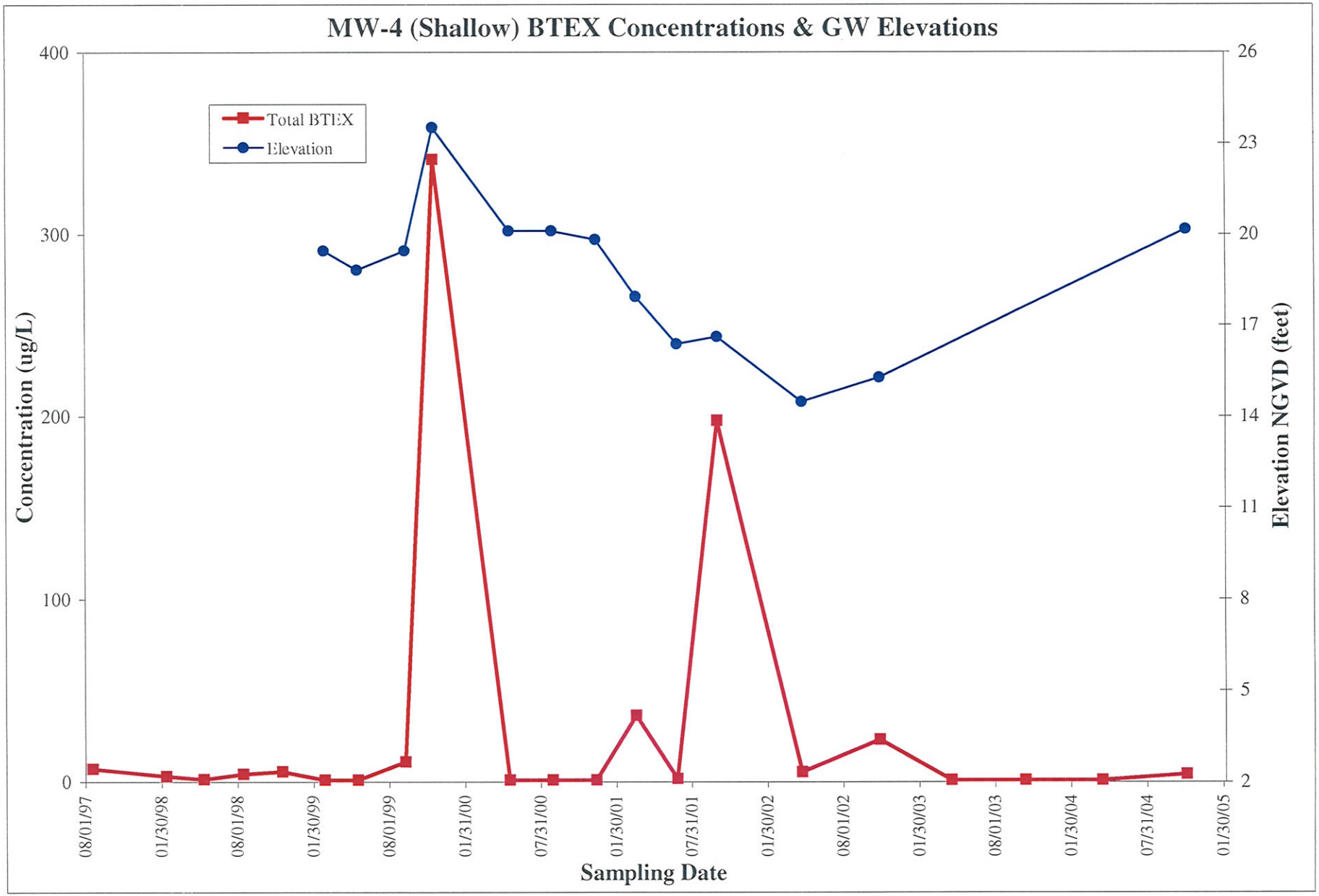

MW-9 (Deep) BTEX Concentrations & GW Elevations
Concentration (ug/L)
100,000
10,000
1,000
100
10
1
Elevation NGVD (feet)
26
23
20
17
14
11
8
5
2
Total BTEX
Elevation
08/01/97
01/30/98
08/01/98
01/30/99
08/01/99
01/31/00
07/31/00
01/30/01
07/31/01
01/30/02
08/01/02
01/30/03
08/01/03
01/30/04
07/31/04
01/30/05
Sampling Date

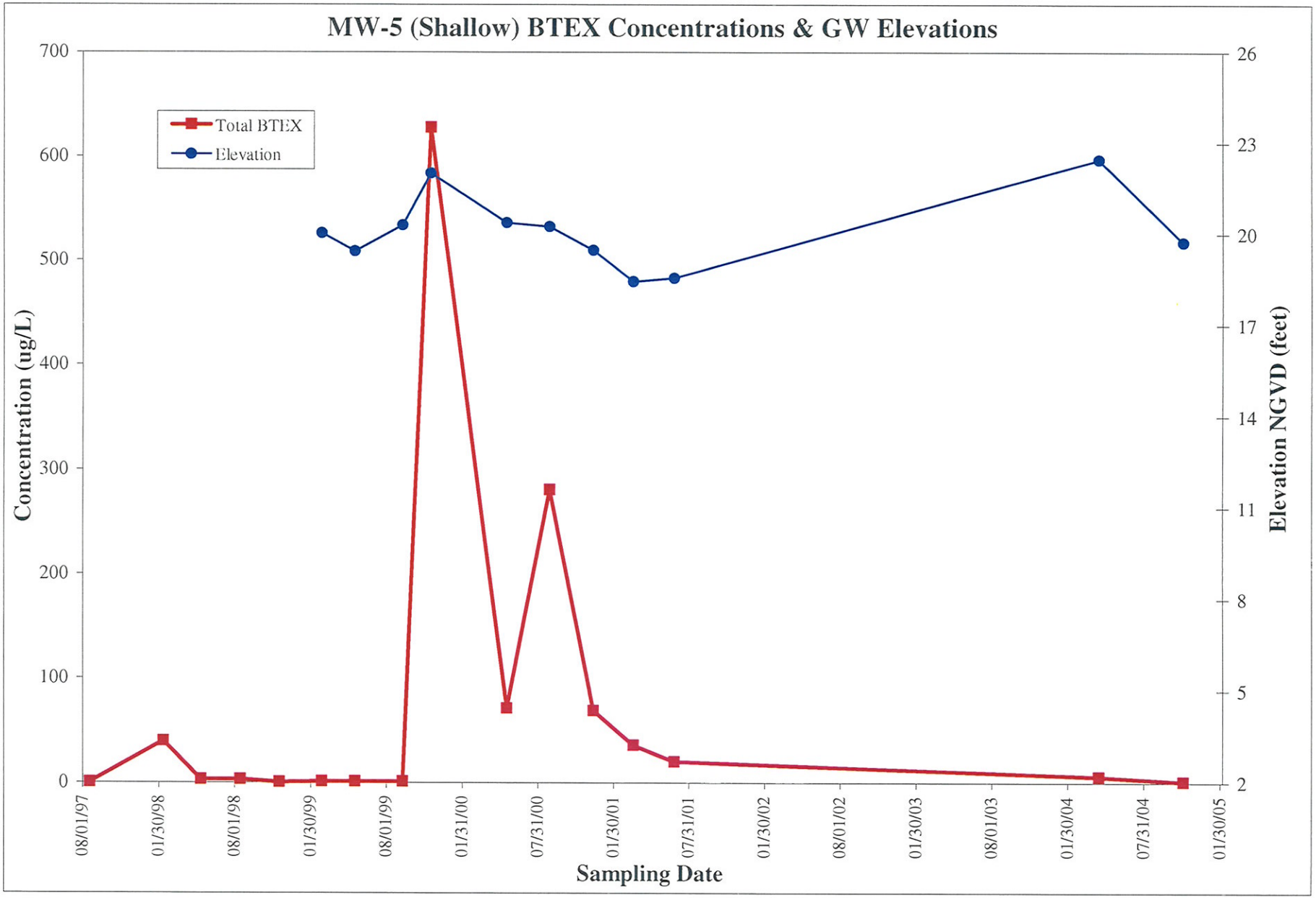

MW-9D (Deep) BTEX Concentrations & GW Elevations
Total BTEX
Elevation
Concentration (ug/L)
Elevation NGVD (feet)
Sampling Date
100
75
50
25
0
26
23
20
17
14
11
8
5
2
08/01/97
01/30/98
08/01/98
01/30/99
08/01/99
01/31/00
07/31/00
01/30/01
07/31/01
01/30/02
08/01/02
01/30/03
08/01/03
01/30/04
07/31/04
01/30/05


MW-17 (Deep) BTEX Concentrations & GW Elevations
Total BTEX
Elevation
Concentration (ug/L)
Elevation NGVD (feet)
Sampling Date
400
300
200
100
0
26
23
20
17
14
11
8
5
2
08/01/97
01/30/98
08/01/98
01/30/99
08/01/99
01/31/00
07/31/00
01/30/01
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01/30/02
08/01/02
01/30/03
08/01/03
01/30/04
07/31/04
01/30/05

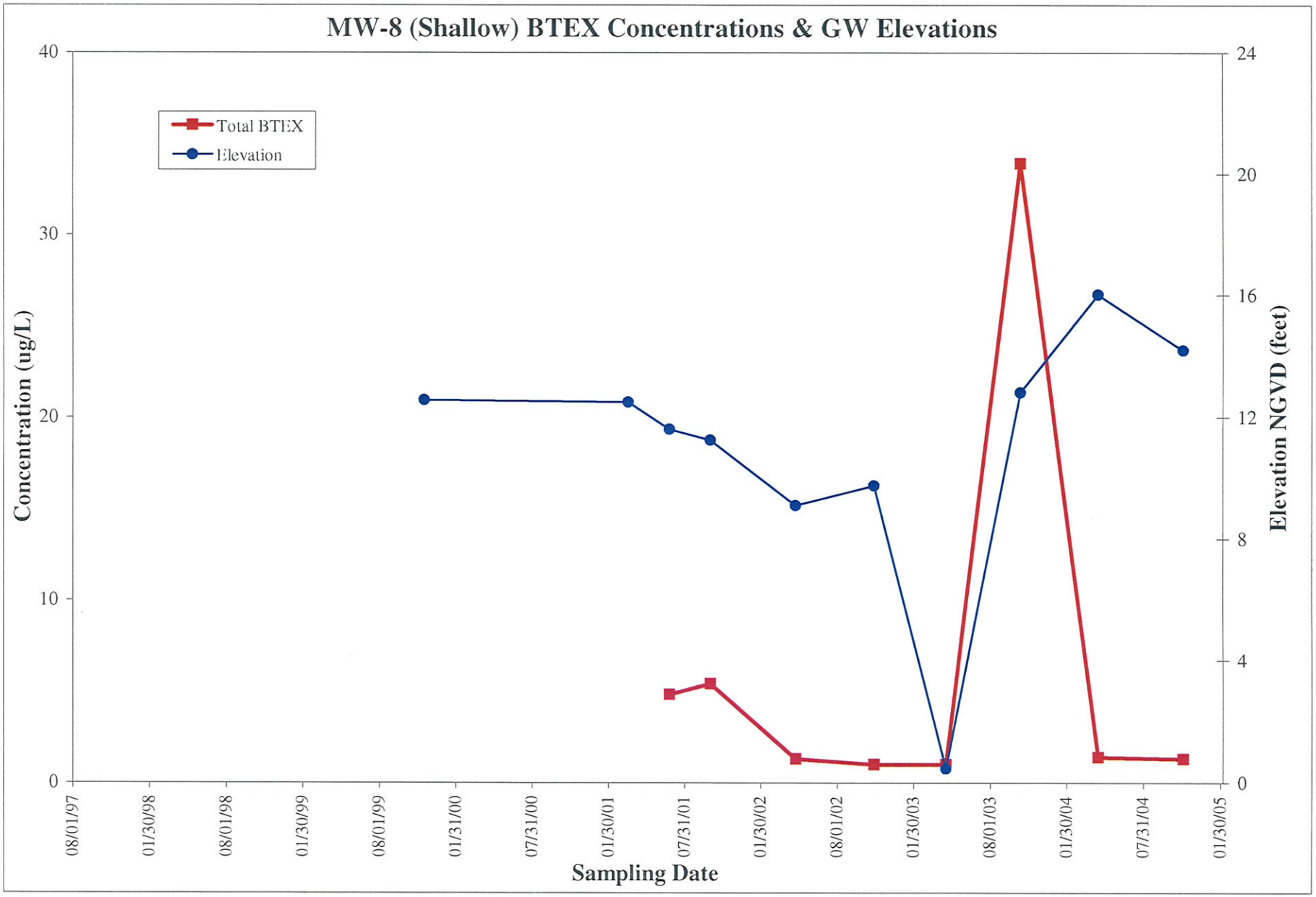

MW-19 (Deep) BTEX Concentrations & GW Elevations
Total BTEX
Elevation
Concentration (ug/L)
Elevation NGVD (feet)
Sampling Date
0
1
2
3
4
2
5
8
11
14
17
20
23
26
08/01/97
01/30/98
08/01/98
01/30/99
08/01/99
01/31/00
07/31/00
01/30/01
07/31/01
01/30/02
08/01/02
01/30/03
08/01/03
01/30/04
07/31/04
01/30/05

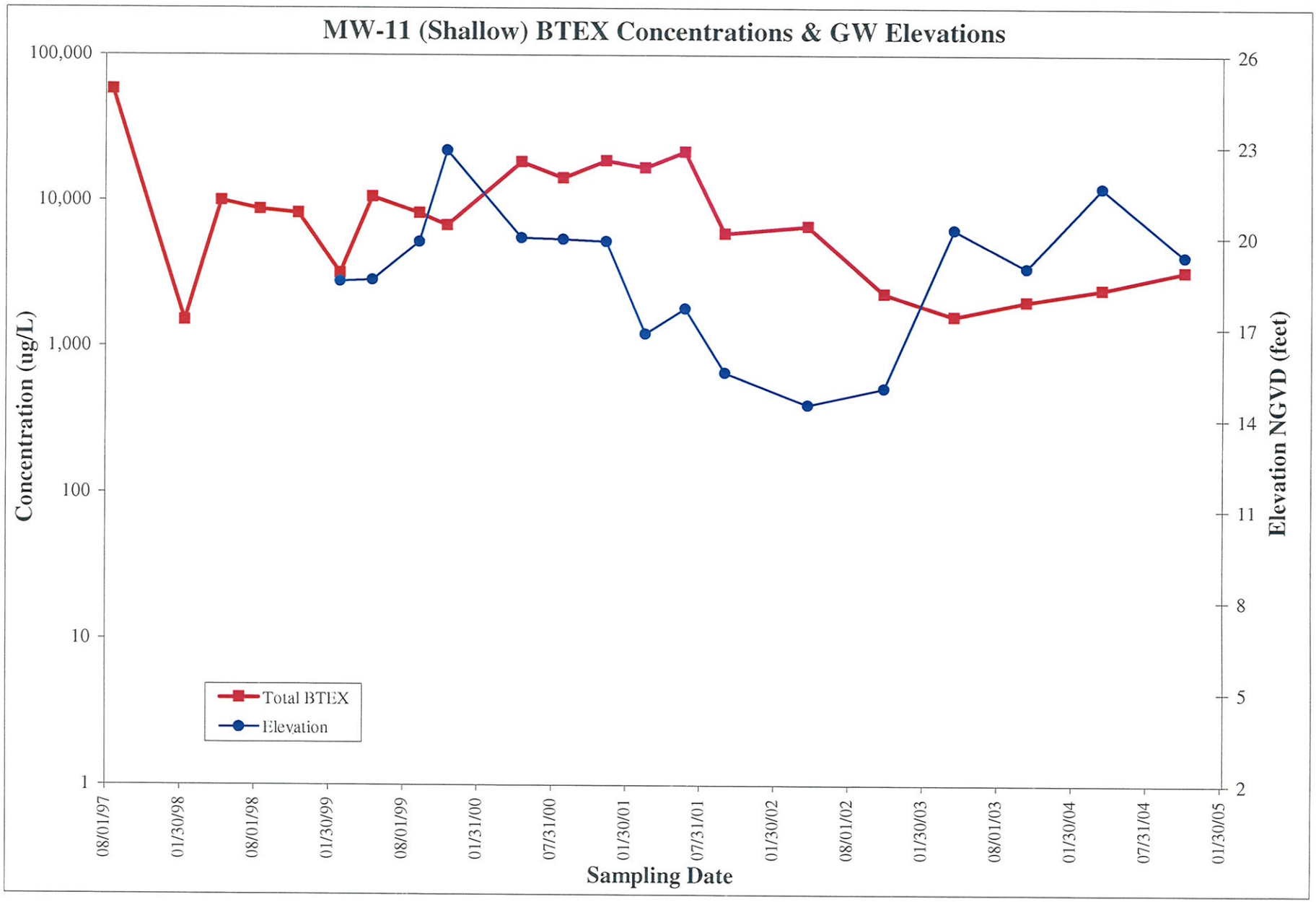

MW-2 (Shallow) BTEX Concentrations & GW Elevations
Total BTEX
Elevation
Concentration (ug/L)
2,500
2,000
1,500
1,000
500
0
Elevation NGVD (feet)
26
23
20
17
14
11
8
5
2
08/01/97
01/30/98
08/01/98
01/30/99
08/01/99
01/31/00
07/31/00
01/30/01
07/31/01
01/30/02
08/01/02
01/30/03
08/01/03
01/30/04
07/31/04
01/30/05
Sampling Date

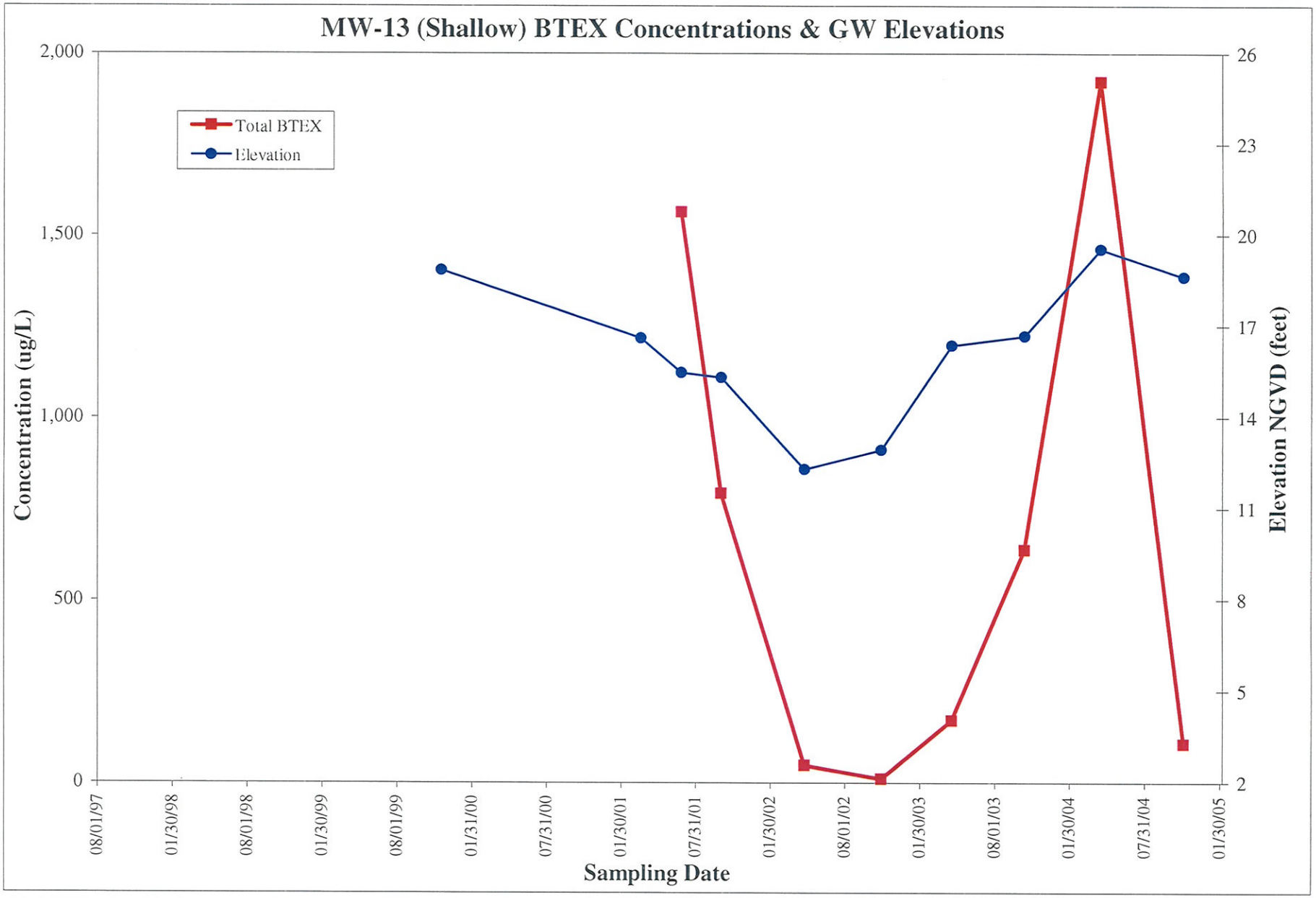

MW-4 (Shallow) BTEX Concentrations & GW Elevations
Total BTEX
Elevation
Concentration (ug/L)
Elevation NGVD (feet)
Sampling Date
400
300
200
100
0
26
23
20
17
14
11
8
5
2
08/01/97
01/30/98
08/01/98
01/30/99
08/01/99
01/31/00
07/31/00
01/30/01
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01/30/04
07/31/04
01/30/05

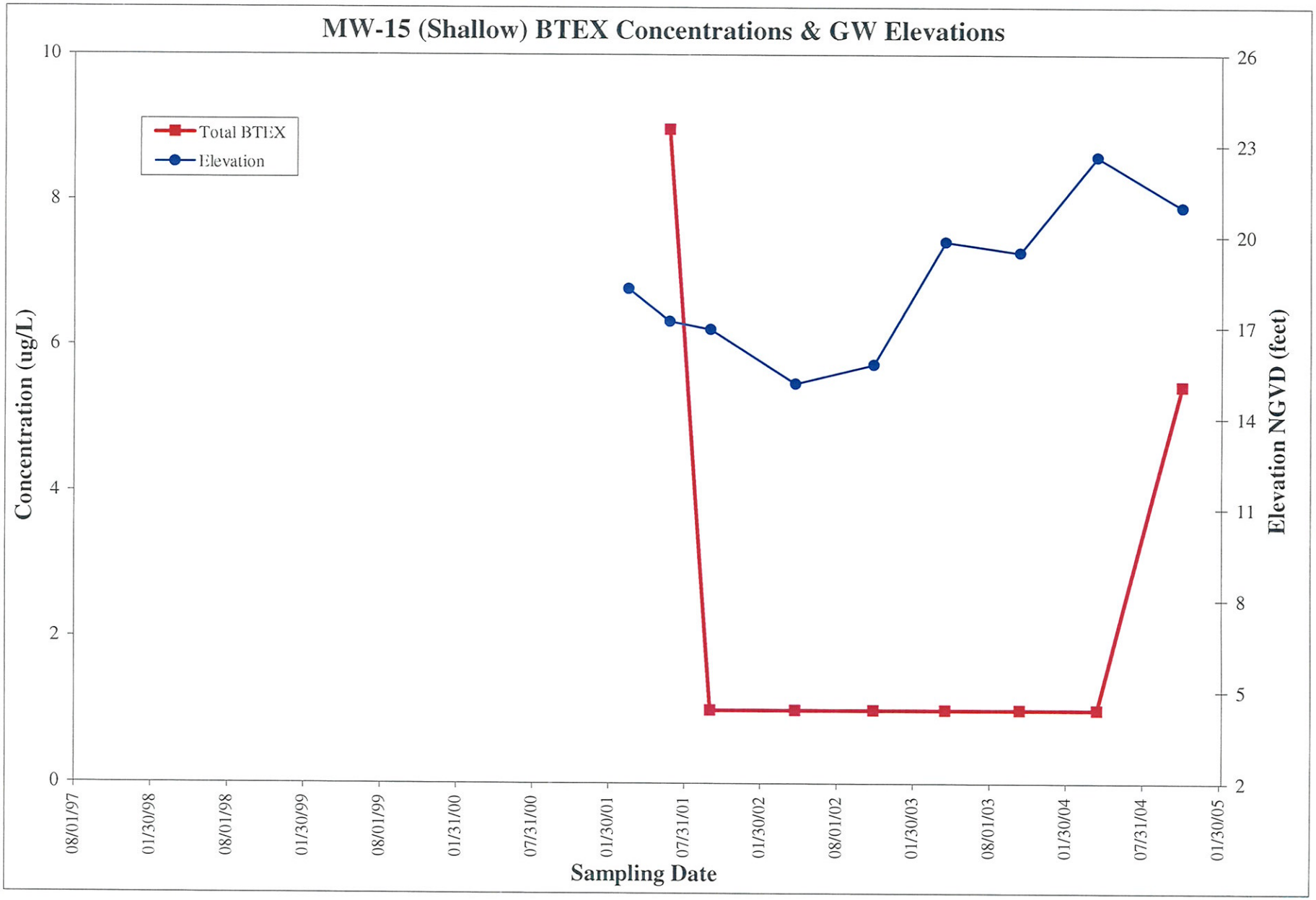


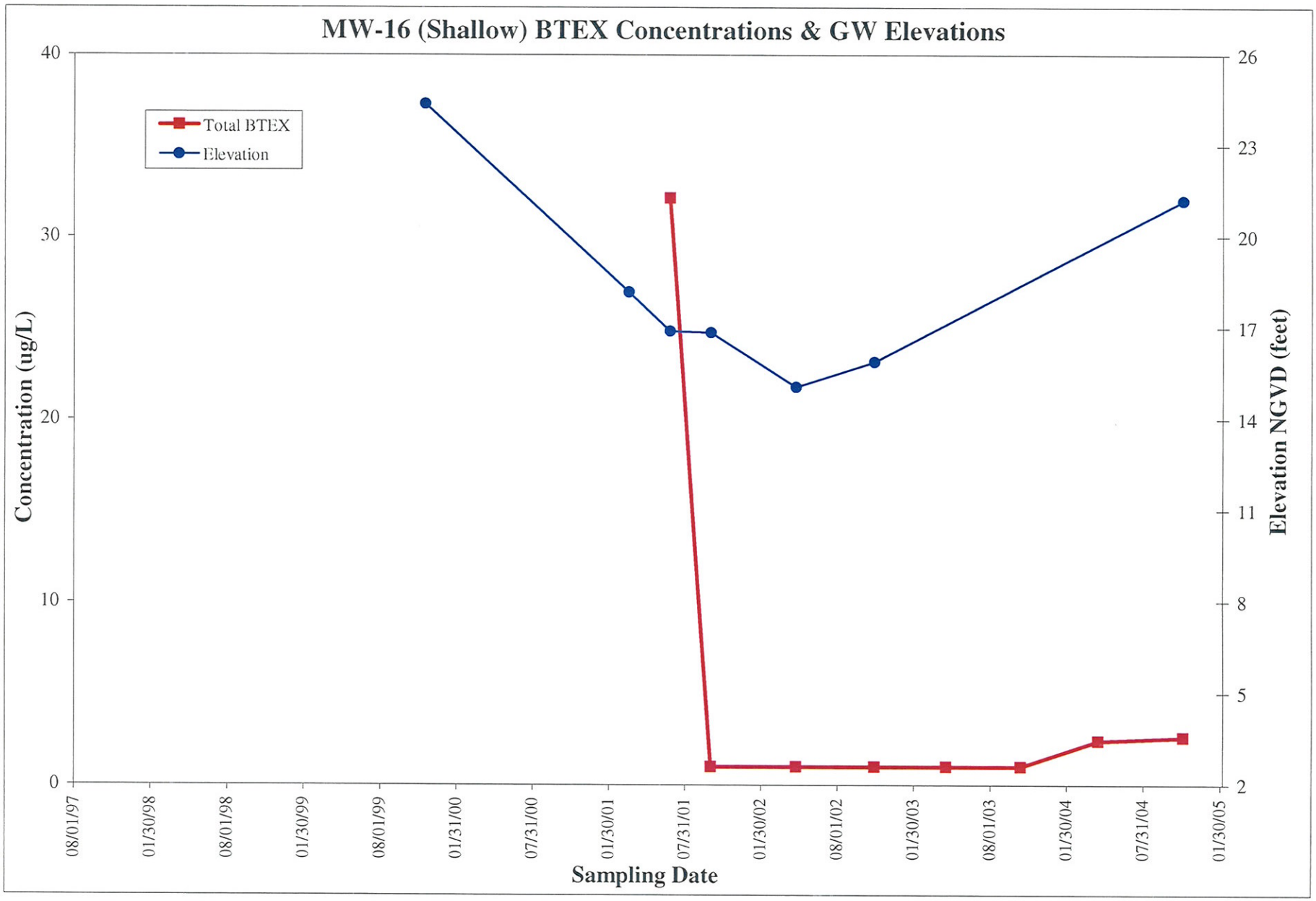
Well MW-5 was found to be dry starting on 10/02/01.

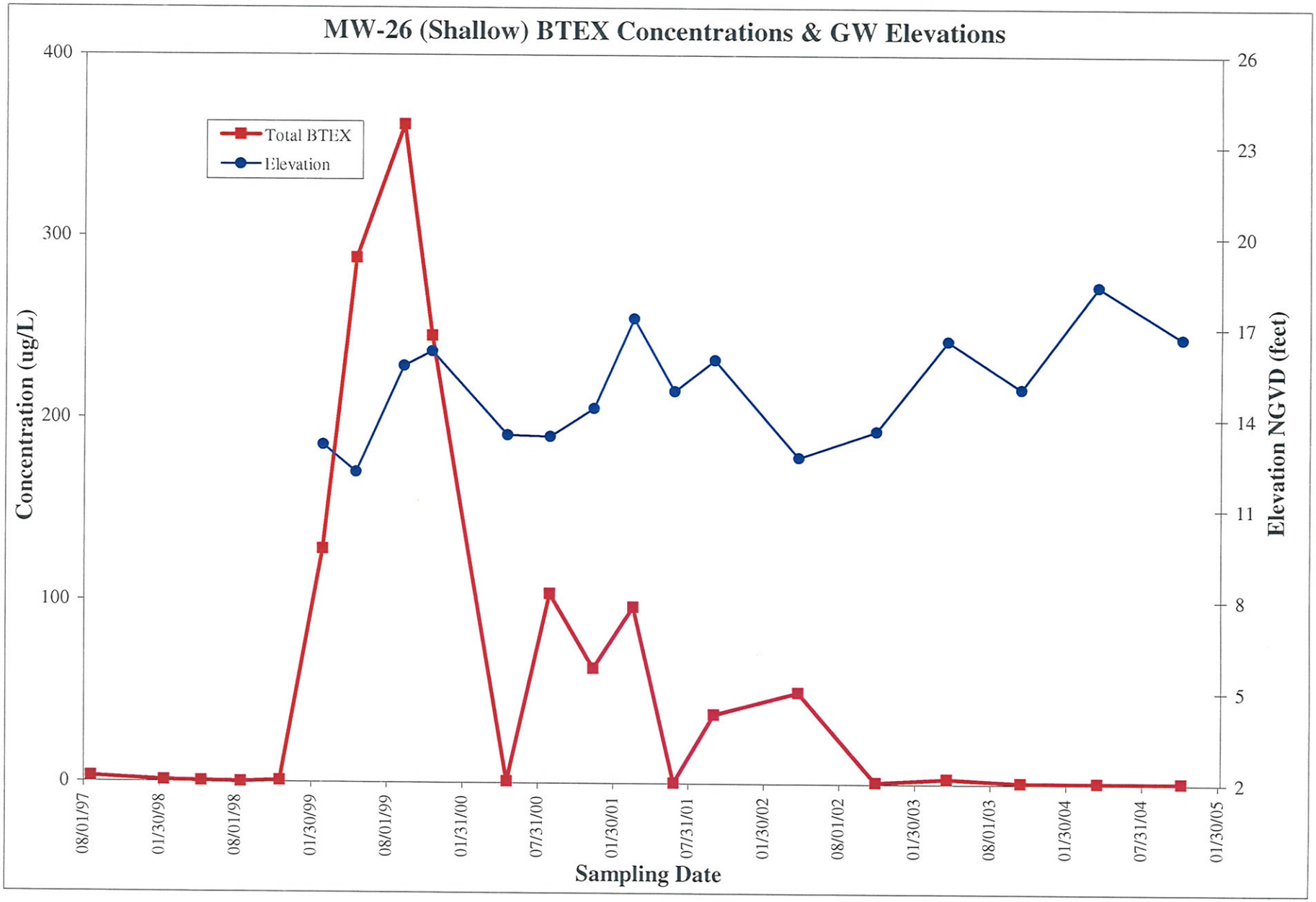

MW-8 (Shallow) BTEX Concentrations & GW Elevations
Total BTEX
Elevation
Concentration (ug/L)
Elevation NGVD (feet)
Sampling Date
40
30
20
10
0
24
20
16
12
8
4
0
08/01/97
01/30/98
08/01/98
01/30/99
08/01/99
01/31/00
07/31/00
01/30/01
07/31/01
01/30/02
08/01/02
01/30/03
08/01/03
01/30/04
07/31/04
01/30/05


MW-11 (Shallow) BTEX Concentrations & GW Elevations
100,000
10,000
1,000
100
10
1
Concentration (ug/L)
26
23
20
17
14
11
8
5
2
Elevation NGVD (feet)
Total BTEX
Elevation
08/01/97
01/30/98
08/01/98
01/30/99
08/01/99
01/31/00
07/31/00
01/30/01
07/31/01
01/30/02
08/01/02
01/30/03
08/01/03
01/30/04
07/31/04
01/30/05
Sampling Date


MW-13 (Shallow) BTEX Concentrations & GW Elevations
Total BTEX
Elevation
Concentration (ug/L)
Elevation NGVD (feet)
Sampling Date
2,000
1,500
1,000
500
0
26
23
20
17
14
11
8
5
2
08/01/97
01/30/98
08/01/98
01/30/99
08/01/99
01/31/00
07/31/00
01/30/01
07/31/01
01/30/02
08/01/02
01/30/03
08/01/03
01/30/04
07/31/04
01/30/05


MW-15 (Shallow) BTEX Concentrations & GW Elevations
Total BTEX
Elevation
Concentration (ug/L)
Elevation NGVD (feet)
Sampling Date
0
2
4
6
8
10
2
5
8
11
14
17
20
23
26
08/01/97
01/30/98
08/01/98
01/30/99
08/01/99
01/31/00
07/31/00
01/30/01
07/31/01
01/30/02
08/01/02
01/30/03
08/01/03
01/30/04
07/31/04
01/30/05


MW-16 (Shallow) BTEX Concentrations & GW Elevations
Total BTEX
Elevation
Concentration (ug/L)
Elevation NGVD (feet)
Sampling Date
40
30
20
10
0
26
23
20
17
14
11
8
5
2
08/01/97
01/30/98
08/01/98
01/30/99
08/01/99
01/31/00
07/31/00
01/30/01
07/31/01
01/30/02
08/01/02
01/30/03
08/01/03
01/30/04
07/31/04
01/30/05


MW-26 (Shallow) BTEX Concentrations & GW Elevations
Total BTEX
Elevation
Concentration (ug/L)
Elevation NGVD (feet)
Sampling Date
400
300
200
100
0
26
23
20
17
14
11
8
5
2
08/01/97
01/30/98
08/01/98
01/30/99
08/01/99
01/31/00
07/31/00
01/30/01
07/31/01
01/30/02
08/01/02
01/30/03
08/01/03
01/30/04
07/31/04
01/30/05